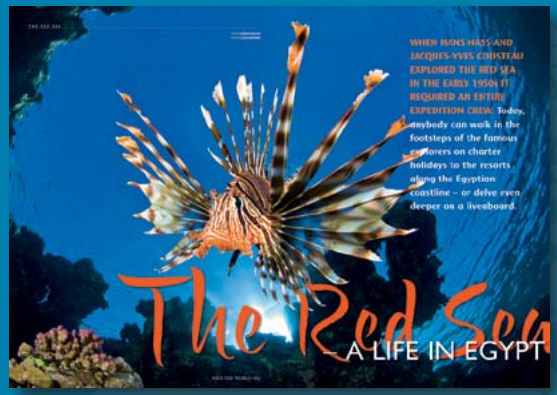
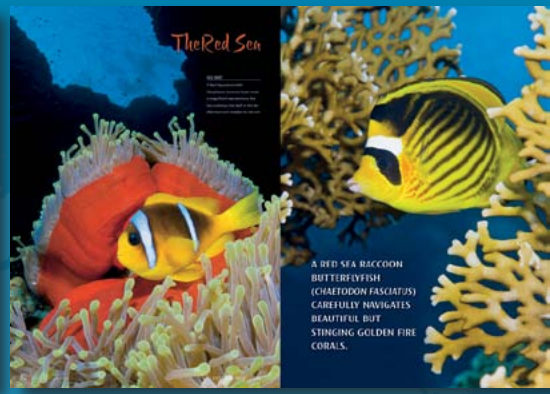
Underwater Photography

May/Jun 2012
Issue 66





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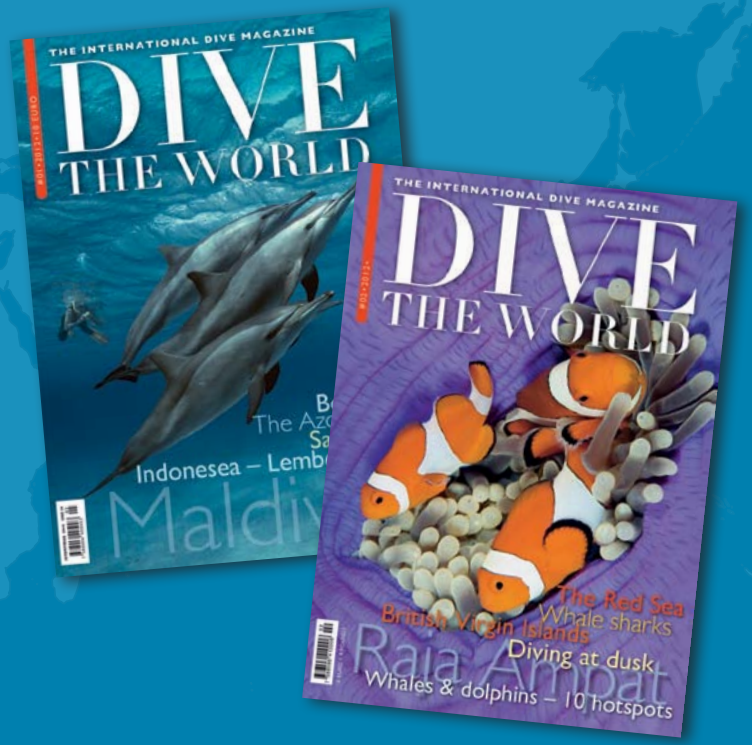

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Cover shot by
Chris Crumley

Underwater Photography

A web magazine UwP66 May/June 2012

Publisher/Editor Peter Rowlands
www.pr-productions.co.uk
peter@uwpmag.com

Editorial

ISO control

Alex M's excellent review of the new Nikon flagship D4 and Nauticam NA-D4 housing in this issue makes drooling reading with talk of superbly fast and precise autofocus, pin sharp pixels and incredibly high ISO performance and it was that last spec that floated my boat.

With each new high end camera comes an improvement in high ISO performance. True, a larger sensor helps provide that but it has now got to the stage where the ISO is now just as important a tool like aperture and shutter speed.

In the bad old days of film the ISO came with the film and you were stuck with it for the whole 36 exposures. True, you could push or pull the processing to use a different speed but it had to be applied to the whole roll.

Nowadays we can adjust the ISO for each exposure and this gives us the ability to have the exact combination of aperture and shutter speed that we want. That way we can control depth of field or capture faster movement sharper by adjusting the ISO.

The Nikon D4 boasts an incredible 100 - 12,800 ISO range which can be extended to 50 - 204,800. In my day it was rare to have an ISO with a comma in it but that changed when the golf ball grained AGFA 1,000 came along. Nowadays it won't be long til there are 2 commas in the ISO speed!

For someone like myself who enjoys the simplicity of available light photography this new capability is very tempting but everything comes at a price and in the case of the D4 and NA-D4 you're talking about the price of a small car. Fortunately there is image processing software out there which can significantly reduce noise in high ISO images for a fraction of the cost of upgrading camera and housing.

The problem is that that same software could also be used on D4 images to enable you to take images of subjects which just a few years ago were virtually impossible to capture.

Exciting times. Exciting times, indeed.

Peter Rowlands
peter@uwpmag.com

Readers Lives

Cover shot

Another fantastic edition UwP65.

Sorry I couldn't get the attached to you earlier, as I'm certain that it would have solved your cover dilemma.

It's not often that a photograph of coelacanths swarming comes to light, and, as I'm sure you'll appreciate, it is not one to waste on lesser, internal, pages.

The technique required to produce this shot is daunting, given the depths involved, these mystical creatures' aversion to light of any kind, and the propensity for the bloody 100mm Canon macro lens to endlesslly hunt for focus in dim conditions.

However, persistence pays off. Final result was achieved at f32 @ ISO 100.

Resolution is excellent in the original so I'm anticipating this will make an outstanding poster, To that end, if you wouldn't mind running an ad for me? I'd appreciate it.

Wade Hughes
www.uwpmag.com

News, Travel & Events

"The secret of Haven" underwater exhibition

This underwater exhibition will start off on the Oil Tanker Haven wreck. Haven sunk 11th April 1991 on the seabed 79 metres depth in the Gulf of Genoa exactly one mile off Arenzano village.

Massimo Mazzitelli and Aldo Ferrucci underwater photographers will show their pictures on this wreck. Pictures will reproduce some particular places like generators, engine, propeller and many other.

20 pictures printed on hard support with a special waterproof ink, will be fixed on stainless steel holder, they will be locate on the high part of the wreck exactly on the first deck and on the chimney max depth 32 metres, so all people can see them.

The exhibition opening will take place May 12, 2012.

www. underwaterartexhibit.com

West Papua on MV Seahorse

12-24 October 2013

This adventure trip will be run on the luxurious MSY Seahorse liveaboard to explore remote Cenderawasih Bay and Raja Ampat in Indonesia's West Papua region on a 12 night trip.

The trip promises encounters with West Papua's amazing Whale Sharks, exploration of the forgotten WWII wrecks of Manokwari and amazing dives with Mantas, Wobbegongs, Walking Sharks and Macro Critters on the exciting reefs of Raja Ampat.

This unique itinerary will ensure that your time spent in West Papua is a truly unforgettable experience.

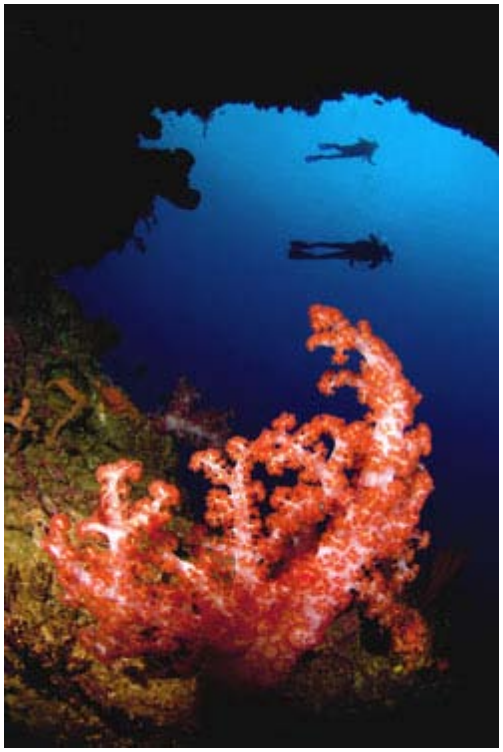
www.equatordiving.com

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

Kevin Deacon to host Photo Workshop with Siren Fleet

August 2013

Renowned underwater photographer and photo journalist Kevin Deacon will be joining the Siren Fleet for 2 photo-workshops in August 2013.

The first will explore 2 exciting destinations in 1 extended combination trip. Starting in the Philippines Kevin will lead a 6 night trip in the Visayan region. Famed for its macro critter diving at Dauin, the fabulous corals of Apo Island sanctuary and more recently frequent whale shark sightings in southern Cebu the Visayas offers diving photographers a variety of sites in which to practice both macro and wide-angle shots.

On the 7th day guests will transfer to Manila and board the short flight to Koror, Palau, to spend a further 6 nights aboard the S/Y Palau Siren. Palau's reefs are known for their attraction to many pelagics. Sites such as Blue Corner and German Channel are frequented by manta rays & grey reef sharks and there is also the opportunity to snorkel in Jelly Fish Lake amidst the non-stinging jellies!

Kevin's workshop will be based around the diving schedule and cover the following topics:-

Equipment ; Camera Control ; Environmental Challenges ; Composition ; Tips for a variety of photographic genres.

There will also be a section on photography with rebreathers and if you would like to try diving with a rebreather the Siren Fleet have units for rental on all of their yachts.

As spaces are limited to just 14 divers early reservation is recommended.

www.worldwidediveandsail.com

Deep Sea Trip

7 - 11 June 2012

Experience deep sea diving on the Yongola on the Great Barrier Reef near Townsville Queensland. Relax on a liveaboard. Special offer $750.

This trip is our 2012 limited offer comprising 5 days and 4 nights. An affordable holiday to remember! You get to dive on some of the most exclusive reefs on the Great Barrier Reef. Anticipate four (4) dives per day including night dives.

Minke Whale season, go snorkelling! Please note days 1 and 5 are travel days. Trip is dependent on 18 more bookings. (To minimise costs the Flights are not included in our special price - however flight bookings may be arranged for groups on request)

Hurry - Bookings Deadline is the 10 May 2012.

www.independentdivinginstructor.com

Jeff Goodman's video & editing workshops

28 Nov - 5 Dec 2012

Jeff Goodman's video and editing workshops for underwater scuba divers returns for a second year following on from his very successful first year events.

These exciting five day underwater workshops are designed for both advanced users and enthusiastic beginners and are based on the real world experience gained during Jeff's thirty years as a successful cameraman and director. The workshop takes place at Marsa Shagra - the perfect diving location for photographers and videographers with a fantastic house reef and unlimited shore based diving!

Our stunning Southern Villages of Marsa Shagra and Nakari are the ideal location for this workshop. Their unique house reefs, the very best and most extensive in the Red Sea are your dream classroom.

www.oonsadivers.com

DRT Show Underwater Photo Competition 2012

DRT Show 2012 will feature the largest underwater photo competition in northern Asian region. If you have great underwater photo, please submit your underwater images online to join our competition, you will got the chance to win over US$30,000 in world class prizes.

The event is hosted by: DRT Show, DiverCommunity.com & EZDIVE Magazine

The Categories are :

Behavior
Reefscapes
Conservation
Nudis
Sharks
Big Stuff
Over-under
Super Macro

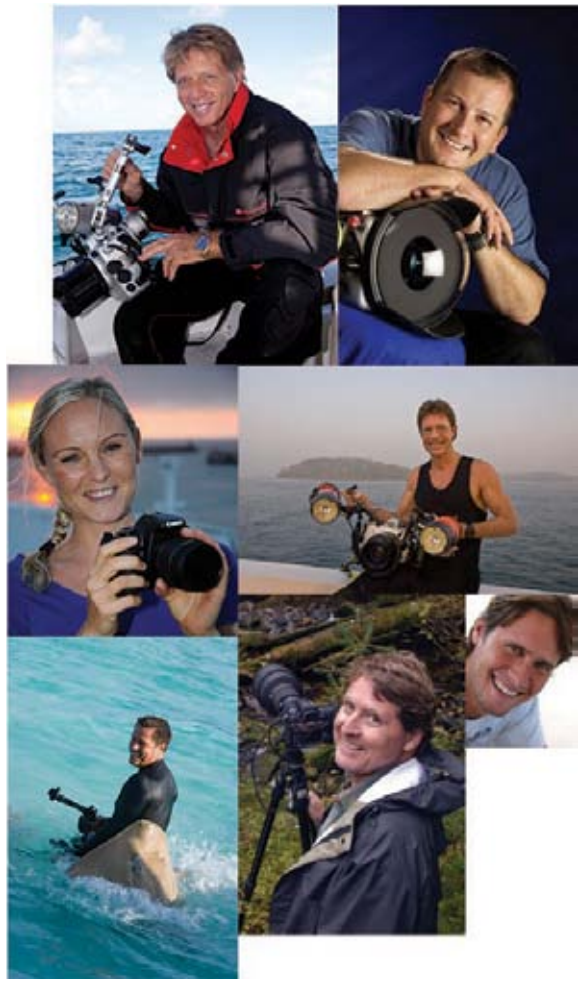
Grand Prize: The Best of Photo Year 2012: USD 3,000 cash prize!

Deadline for submissions 08 Oct 2012

Winners will be announced on 15 Dec 2012 online and displayed in the DRT Show Exhibition Hall.

www.divingandresorttravelexpo.com

Worldwide Dive and Sail Underwater Photography Workshops 2012



Worldwide Dive and Sail has always been a keen supporter of underwater photographers and design our yachts to accommodate photographer's needs.

This year we are pleased to welcome back Mark Strickland, Chris Huss and Gerald Rambert aswell as welcoming onboard Jennie Soriano who will each be escorting several workshops. There will also be a number of photography expeditions accompanied by Stephen Frink of Waterhouse Tours and Matt Weiss of DivePhotoGuide.com and Scott Geitler of uwphotographyguide.com as well as Jason Isley from Scubazoo and Werner Thiele from Waterworld.

We would love for you to join us and see how easy and fun it can be to improve your underwater photography techniques. We welcome users of both compact digital cameras and digital SLR's on board.

Our yachts have dedicated preparation areas, plenty of charge points, storage areas, large rinse tanks, computers in every cabin to allow you to download and edit your days work and a large plasma screen in the saloon to view and share your days pictures with your fellow guests.

www.worldwidediveandsail.com

MSY SEAHORSE.COM

Download our online brochure
HERE

Galapagos on Darwin Buddy

September 8-15, 2012

We've had three cancellations for our charter on the new Galapagos Buddy liveaboard this fall, and are releasing them to this mailing list for the first time. This is a special introductary charter rate on a new boat in prime whale shark and hammerhead season!

Located at the confluence of five major ocean currents, these islands are fed by nutrient rich cold water currents, resulting in a very unique equatorial climate. There is tons of action underwater in the southern islands, with frequent sightings of turtles, whiteip reef sharks, rays, sea lions, and large schools of fish. The Northern islands of Wolf and Darwin are one of the top whale shark and schooling hammerhead locations in the world, and all of the dive sites have spectacular volcanic topography.

The charter fee is $4150, and these spaces will go fast!

www.reefphoto.com

Photography Adventures

visit www.GregorySweeney.com

Sailfish & Sardine Run
in Isla Mujeres, Mexico
January 14 - 20 2013
*more dates in Jan
private charter, limited to 5 guests

Tiger Sharks Bahamas
March 8 - 14 2013

Whale Sharks - Mexico

Manatee Photography
February 2013

Africa Photo Safari

DSLR Housings for

CANON
5D Mark II
7D
40D, 50D
60D
450D Rebel XSi
500D Rebel T1i
550D Rebel T2i
600D Rebel T3i
1000D Rebel T3

NIKON
D80
D90
D300
D300s
D700
D3100
D5100
D7000

OLYMPUS
E330

PENTAX
K-5
K-7

SONY
A33 SLT, A55 SLT
A35 SLT
A65 SLT

DSLR Housings

Ikelite digital SLR housings offer top-of-the-line professional grade features in a contoured, durable and corrosion free case. A clear view of the camera and o-ring seals is an added advantage during both assembly and operation. Thoughtfully placed controls put important camera functions within comfortable reach.

Our proprietary circuitry remains the most accurate and reliable TTL on the market today. And because we feel that TTL exposure is so important to underwater photography, we build it into every digital SLR housing. Enjoy perfect exposure in every shooting scenario when used with compatible Ikelite DS Substrobes.

- Four Port Locks
- Top Accessory Mount
- Tripod Mounting Point
- Pro Video Lite 3 Battery Pack Mounting Points
- Video Trigger Control for Cameras with Video
- New Handles and Tray

DS161 Movie Substrobe
The DS161 Movie Substrobe combines all of the functionality of our renowned DS160 with a powerful 500 lumen LED video light. This strobe is everything you need for stunning photos and video.

DS160 Substrobe
The Substrobe DS160 has quickly made its mark becoming the favorite of underwater photographers.

Underwater Systems • 50 W. 33rd. Street • Indianapolis, IN • 46208 • 317-923-4523 www.ikelite.com

New Products

Ikelite housings for Nikon D800 and Canon EOS 5D Mark III

Ikelite have announced these new housings which have all of the professional-grade features a camera of this caliber demands. They are the only housings to offer built-in hard-wired true Nikon iTTL metering with an underwater strobe. And more than a little pocket change left over for your next equipment purchase.

Direct connect flash is the most reliable and efficient way to fire an external underwater strobe. The camera's built-in flash does not need to fire, providing the extended battery life and no lag between exposures. Our proprietary circuitry allows direct communication between the camera and current Ikelite DS Substrobes* for the most accurate through-the-lens (TTL) metering control of an off-camera flash. Electrical bulkhead and TTL circuitry are provided standard and included in the base purchase price.

Controls are provided for every camera function except the metering selector, diopter adjustment control and flash pop-up button. Shutter, video recording start/stop, and a large zoom control knob can all be comfortably reached without removing your hands from the handles. Comfortable rubberized grips provide quick-release attachment points for strobes and accessories.

The complete housing is neutral or slightly negative in freshwater depending on choice of lens port.

200ft (60m) depth rating. The US Suggested Retail Price is $1,600 Lens port, camera and lens not included.

www.ikelite.com

Patima S100 Housing For Canon S100

The Patima S100 Housing For Canon S100 is a high quality machined aluminium housing with a 67mm port thread for wide-angle and macro lenses

It is depth rated to 120m (deepest diving compact camera housing available) and the extremely sturdy casing has precision controls for all camera functions

Weight: 800gr

Dimensions: 125 x 95 x 90 mm

Price £599

www.oceanleisurecameras.com

Olympus PT-052 housing for the TG-820

When the action moves from the beach to the water, your Olympus digital camera needn't be left behind. The PT-052 underwater case has been specially customised for the TG-820 camera and is waterproof up to a water pressure equivalent to a depth of 45 metres. This case is perfect for fascinating underwater photography or capturing the thrill of water sports and activities. With its durable, high quality polycarbonate construction, it protects the camera from water while also cushioning it from knocks and bumps on land. Complete control of photo functions, such as zoom and flash mode, is also permitted.

www.olympus.co.uk

Nauticam NA-GX1 for Panasonic GX1

Nauticam proudly announces the NA-GX1 Housing for Panasonic Lumix DMC-GX1. This housing is introduced at a new, aggressive price point for a rugged, machined aluminum housing with unmatched ergonomics.

This housing puts all of the important controls on the camera within easy reach. The shutter release is sculpted into the housing itself, landing the right index perfectly on the button. A four-way controller with set button is easily reached from the right. The record button is easily accessed on top of the housing, and zoom is conveniently accessed from the left side of the housing. NA-GX1 also features an audible and visual leak detector, mounting hole on housing, and cold shoe accessory mount.

www.nauticamusa.com

Underwater Camera Hire

We have some of the best underwater videography equipment available, which can give you outstanding results for a fraction of the price of buying new.

Now in our 6th year, we have lots of very happy customers which include : TV Companies Freeform Productions, Out There News, IKandi Media ltd and Eco ltd. and Organisations like the Born Free Foundation

And not forgetting lots of independent divers as well.

We offer a service that provides you with hi spec equipment that can produce amazing footage and images that can either make your company standout from the crowd, leave your viewer breath taken or capture your dive holiday memories in superb hi-definition.

www.underwatercamerahire.com

Seatrex HD

The Seatrex HD incorporates a 1/3-type HD CMOS image sensor boasting approximately two million effective pixels, and provides a 16 x 9 aspect ratio, making it ideal for use with wide-screen displays. When extremely clear, super picture quality HD images are required, the Seatrex HD camera offers 1080i and 720p signals. With a 120x zooming capability, Picture Freeze function, SPOT AE function, and Slow Shutter, the Seatrex HD is ideal for applications such as inspection, underwater exploration, and point-of-view (POV) applications.

www.splashcam.com

Nauticam NA-D800 for Nikon D800

The NA-D800 is an evolutionary marvel of everything Nauticam users have come to appreciate from the brand with several revolutionary new features added. The industry leading innovations of recent Nauticam housings are obvious with the easy and secure latching system, unrivalled port locking lever system and the superb interchangeable viewfinders. The award winning ergonomics of previous housings have been retained with subtle refinements wherever appropriate. The NA-D800 supports both the Nikon D800 and D800E cameras.

In an impressive engineering breakthrough, Nauticam has patents pending on a new Multi Controller Pad located within easy reach of the right thumb. The device virtually recreates the Nikon multi selector on the back of the NA-D800 housing allowing full multidirectional use of this powerful tool. Amazingly, all 51 focus points can now be reached by a direct approach – even on a diagonal. All of the other scroll and select functions are equally enhanced without ever having to move from one button to another in the traditional fashion.

All Nauticam housings are machined from a solid block of seawater resistant aluminum alloy and then hard anodized making them impervious to corrosion. Hardware is marine grade stainless steel. Clear acrylic windows are protected with a scratch resistant coating.

Depth Rating: 100m. Dimensions (with handles mounted): 194mm x 351mm x 134mm. Weight: 2.81kg (6.1 lbs.)

www.nauticamusa.com

SeaLife Twin-Flash DC1400 Pro X2 Package

SeaLife, the leading manufacturer of underwater cameras, has created the twin-flash DC1400 Pro X2, an extraordinary package for underwater photographers.

With a pair of extremely powerful strobe lights on each side, the DC1400 Pro X2 package combines brilliant illumination with a feature-packed, easy-to-use 14-megapixel underwater camera that will bring out the professional underwater photographer in you on any dive.

Based on the state-of-the-art DC1400 digital camera accompanied by two Digital Pro Flashes, the DC1400 Pro X2 package was designed to create an underwater studio, no matter where your adventures lead you.

The Digital Pro Flash on each side of the camera body creates the ideal underwater lighting studio. Each flash can be easily positioned for the most advantageous illumination of your subject. The Digital Pro Flash has an "Auto Mode" thyristor rectifier that automatically adjusts flash brightness for optimal image exposure. A variable-power adjustment also allows the user to manually set flash intensity. The color

temperature of each flash provides compensation for the underwater environment-an environment that tends to absorb the red and yellow portions of the light spectrum-resulting in astonishing colors of both coral and sealife. The Digital Pro Flashes are depth rated to 200 ft., and their effective underwater shooting distances are up to 8 ft.

The DC1400 Pro X2 package comes complete with a DC1400 camera, a pair of Digital Pro Flashes, a Flash Link trigger module to operate both flashes simultaneously and a deluxe soft case. The retail price of the DC1400 Pro X2 is $1,149.95.

www.sealife-cameras.com

Bigblue AL 1x5 AFO LED Focusing Light

The new Bigblue focusing/ spotting light has an advanced auto flash off function that prevents any light leakage from your torch. The Bigblue spotting light will quench automatically upon detecting a flash being fired. Ideal light from every underwater photographer.

The output of this light is 250 lumens which is over 10 times the power of the other mini spotting lights currently sold. Don't leave the surface without one.... especially if it is a night dive. The burn time is 2

hours from 3 x AAA batteries and the aluminium housing is rated to 100 metres.

£99.00 (Note: The accessory shoe adapter is sold separately)

www.oceanleisurecameras.com

Zen DP-100-NC
4" Glass Dome Port for Canon 8-15/4L

So you think you need a huge dome port to take advantage of your fisheye lens? Think again!

Canon 8-15 /4L is the highest quality fisheye lens we've ever tested, and is perfectly suited for close focus wide angle shooting in small domes.

New versions of our popular Zen DP-100 4 Optically Coated Glass Fisheye Dome Port are being constructed with integrated spacers to support this lens. Depth Rating 100m. Dome Material: Optical Glass. Weight: 600g

www.reefphoto.com

Hugyfot Mini Dome

The Hugyfot mini dome with optical glass is now available. Equipped with the standard Hugyfot bayonet catch and solid aluminium sunshades, the dome is suitable for the Tokina 10-17mm, Nikon 10.5mm, Nikon 16mm and Canon 15mm fisheye lenses.

www.hugyfot.co.uk

Bluewater photo 10 commandments of customer service

I) We get you what you need - even if we don't sell it directly
II) We enjoy helping our customers
III) We learn the proper settings on everything we sell, and share it with you
IV) We always return phone calls
V) We don't promise what we can't deliver
VI) Our prices are fair and competitive
VII) We love to teach you how to get better pictures
VIII) Pictures are stories that need to be shared, we help you share your experience
IX) We respect and treasure the ocean and its inhabitants
X) We believe that underwater photography is for everyone and we have systems and trips for every budget

Optical Ocean Sales sells Seacam

SEACAMUSA, the exclusive North and South American distributor for Seacam underwater housings and submersible strobes, is proud to announce the appointment of Optical Ocean Sales as a Seacam dealer.

In recognition of their 9-years service to the local Northwest diving community and the passion for underwater photography by owner Jack Connick, SEACAMUSA owner Stephen Frink comments “We are very pleased to have Jack and his staff as members of the SEACAM team. We welcome their expertise

and commitment to customer service to underwater photography, and the SEACAM product line in particular.

www.opticaloceansales.com

Backscatter Custom GoPro housing

The latest Backscatter GoPro Underwater Housing features an all new design built from the ground up, featuring a glass element and a custom machined aluminum mounting ring capable of holding specialty filters for both underwater and topside use. The housing works with all GoPro HD Hero models including the new Hero 2.

The optical glass element allows the Hero cameras to deliver sharp focus underwater, overcoming a major shortcoming from the existing stock GoPro housing. Best of all, our new housing has does not vignette underwater at any angle of view including the 170 degree super wide setting on either the original HD Hero or the Hero 2.

The Backscatter Custom GoPro Underwater Housing has a 55mm thread on the mounting ring allowing the use of a variety of third party filters. For minimizing vignetting, bare filters can be used with the housing thanks to an o ring retaining system that will hold them securely in place.

Backscatter is offering an exciting series of filters for underwater and topside use. For underwater use, we've worked with Magic Filters to develop a custom made red filter to bring back rich colors while diving. You can see footage that shows the drastic difference in footage quality with and without the filter.

In order to combat the shaky footage that is inevitable from trying to hold such a small camera, Backscatter has developed an inexpensive handle and tray system that allows for easy mounting of various lighting systems.

Featuring a comfortable foam grip, the Backscatter Handle & Tray system includes a tripod mount for mounting the GoPro directly, and also offers the option of using the quick release mount with adhesive that comes with all Hero 2 cameras. The Handle has a hole drilled out where an Ultralight or Locline mount can easily be installed, making it the perfect platform for adding a light to your GoPro system.

The Backscatter Custom Underwater GoPro is competitively priced at $119.

www.backscatter.com/go/?gopro

UK Germany GoPro accessories

UK Germany have announed 3 new accessories for the aluminium GoPro housing.

The first is a base tray and handle for steadying footage and the second 2 are red and magenta filters to improve colours underwater.

The filters are €49.98 each and the tray and handle are €79.73

www.uk-germany.com

Intova unveiled Sport Pro

Small and compact, SP1 offers full 1080p High Definition Video with a 140 degree wide angle lens. This design allows the maximum view angle without the significant distortion found in wider lens angles.

Intova's unique and patented Unibody design builds the electronics directly into the compact housing. The housing floats and is constructed of rugged polycarbonate injected with UV. The lens port receives a proprietary UV treatment to increase scratch resistance and reduce reflection.

Its flat design allows seamless

operation above or below water. Waterproof to 200 feet, the housing includes buttons for full camera control in any environment.

SP1's high quality LCD screen acts as both a viewfinder and playback monitor. To save battery life, the LCD can be turned off when not in active use. SP1 utilizes a standard ¼" tripod thread to fit a wide range of Intova mount accessories.

www.intova.net

Acquapazza APSO-NEX5N

Acquapazza is pleased to announce that, as of April 23, 2012, their new version of the APSO-NEX5N Sony NEX-5N housing is now available. A number of factors resulted in a delay from development to market but the result is an exciting product with wonderful capabilities.

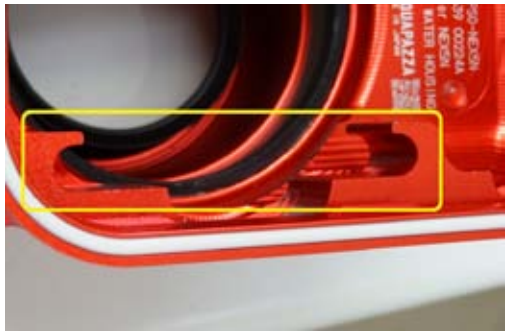
These new features will be incorporated in future generations of Acquapazza housings:

1. A bayonet port
2. The AMRS allows you to choose from the zoom gear or the focus gear.
3. The newly-developed Quick Shoe

The precision of this Quick Shoe is very high. Normally a shoe seat would be a separate piece attached to the inside of the housing.

However, inside a housing it is actually quite difficult to maintain horizontal and vertical alignment so Acquapazza did away with the old type of assembly and had the seat machined into the body which ensured that the mechanism would be precisely positioned.

Additionally, the lock for the Quick Shoe is unique. The lock is formed by two claws, tied together by a bridge so that with one action,



the two claws lock or unlock the shoe fitting.

Now with the Quick Shoe, setting up your camera will be a breeze!

www.acquapazza.jp/en

Wahoo HD Underwater Monitor Housing for Sony CLM-V55 Monitor

The Wahoo HD offers visual inspiration for creative underwater video and photography. With over 1.1 million dots densely packed on a 5 inch screen, the Sony CLM-V55 monitor offers the sharpest image available in a compact monitor. Configured with HDMI connectors, it delivers unparalleled image quality with 720 and 1080 signals. Finally, DSLR users can see critical focus and white balance color underwater.

The Wahoo HD offers visual inspiration for creative underwater video and photography. With over 1.1 million dots densely packed on a 5 inch screen, the Sony CLM-V55 monitor offers the sharpest image available in a compact monitor. Configured with HDMI connectors, it delivers unparalleled image quality with 720 and 1080 signals.

Not sure if that pygmy seahorse is in focus? With a click you can activate Focus Peaking mode. The high resolution screen switches to black and white for maximum contrast. Sharp areas are highlighted in bold red outlines making it easier to follow focus when subjects are on the move.

The rugged aluminum WahooHD housing is engineered for technical diving to 450 feet.

HDMI connections offer a true HD signal, but they require 19 wires. A plug-able connector is just begging for trouble in a wet environment. Our rugged hard wired cable design delivers full HDMI digital connectivity with maximum reliability. Base Price $1,399.00

www.backscatter.com

Bigblue Fluorodive Kits

Science has discovered corals contain Fluorescent Proteins invisible to the naked eye that jump into view using innovative high-intensity fluorolights and filters.

Bigblue Fluorodive Kits provide everything you need to experience these incredibly beautiful effects. They are available for Big BlueCF-250, Cf-600, VL-1300 and VL-1800 lights.

You get specially designed

blue filter and deep blue filter to precisely match the coral fluorescence wavelength, and yellow blue-barrier filter mask to increase the intensity of the colors emitted by the corals. Our innovative snap-on and flip-open filter allows you to easily switch between blue and white light to accommodate changes in dive conditions.

These kits are suitable for night divers, resorts, science institutions, ecological monitoring groups and specialty photographer.

www.scubasymphony.com

Retra UWT

The Retra UWT Team is introducing a new Light Shaping Device. It features the most advanced optical system ever made for underwater light shaping.

The lenses inside LSD are custom made and coated with a special Anti-reflex coating to deliver the best performance possible.

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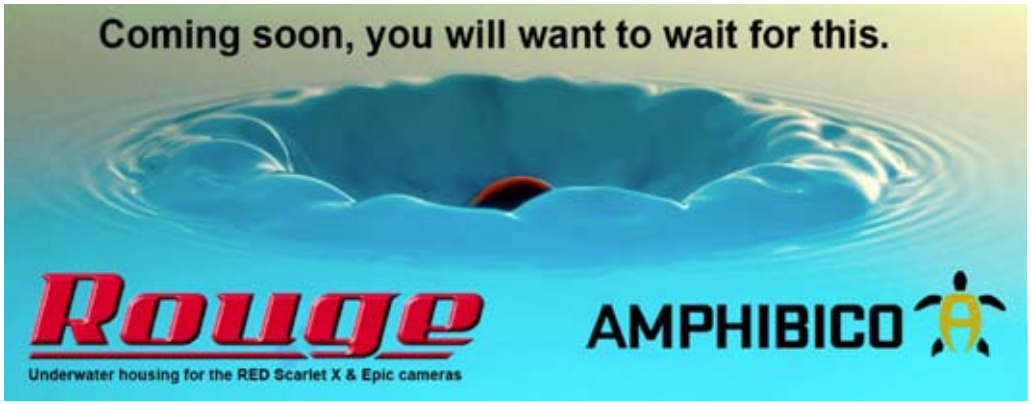

Our development and engineering team has been hard at work for the past few months gathering all the pertinent intelligence required to proceed at full throttle on the design work around our ROUGE housing, conceived for the RED Epic and Scarlet-X Digital 4K & 5K movie cameras. Our prototype is expected mid July.

Amphibico has a long tradition of excellence when it comes to developing the most ergonomic housings on the market, a lineage that includes no less than the flagship HD Amphibicam housing for the Sony F900 and the Phenom housing for the Sony FX1 & Z1, both housings using the state of the art electronic control grip system that have set Amphibico apart from its competitor.

The engineering staff has committed all of its resources, including seeking the expert advice of key professional underwater

videographers in the industry, to accomplish and execute this project. Keeping Amphibico's innovative mindset for advanced underwater imaging technology is the key to our future.

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High Definition pan and tilt zoom (PATZ) camera, OE14-522

The Kongsberg Maritime OE14-552 Underwater HDTV PATZ Camera provides completely enclosed pan and tilt viewing angles, previously unobtainable, with its uniquely designed, precision machined, omega dome. The domed port and optical zoom provide a close-up inspection capability combined with the flexibility of a 10x magnification for standoff inspection. A smooth belt driven Pan and Tilt mechanism provides accurate and infinitely variable speed control head movement.

The OE14-552 is a multi-standard camera with the ability to change video formats by IR remote control (RC) or by GUI.

Video output is available as Component (Y, Pb, Pr) and HD-SDI on coax or fibre connectors (Single or Multi-mode). CWDM alternative wavelengths are also available. It is possible to easily switch to high resolution composite video output if HD is not required for certain tasks.

Long line drive can be set by RC or GUI and allows the component signal to drive three matched coax cables with no degradation over three hundred metres.

It has a unique 220° optical viewing angle and a 10:1 optical zoom lens with multi-standard video capability.

www.km.kongsberg.com

Dive the world magazine

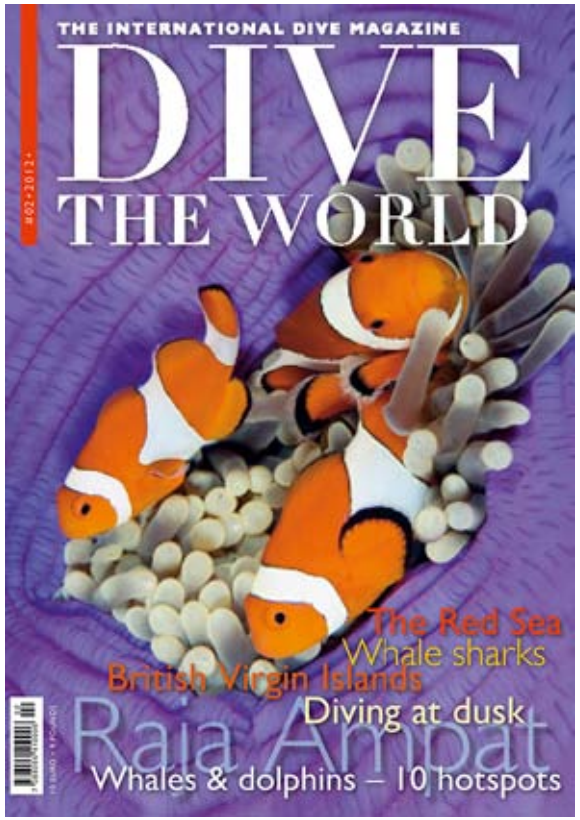
The publisher behind the Scandinavian Dive Magazines, DYK in Denmark and Sweden, launched a new international dive magazine in January 2012.

DIVE THE WORLD – The International Dive Magazine is a global lifestyle magazine focusing on extraordinary dive experiences, dive travel, exotic location and exciting marine life encounters.

In our opinion many dive magazines kill the underwater images by cramping too many and too small photographs together in too little space – and they suffocate the pages further with ugly advertising, says editor in chief Jesper Kjøller

Above all, diving is a visual activity. And with DIVE THE WORLD we will, to a large extent, let the images speak for themselves – supported by quality writing, of course.

Our goal is to take the reader along with us on a dive, even if they are relaxing in an armchair or airplane seat with the magazine. Properly telling a story requires space, and we will gladly let an article fill more than 20 pages if that is what it takes

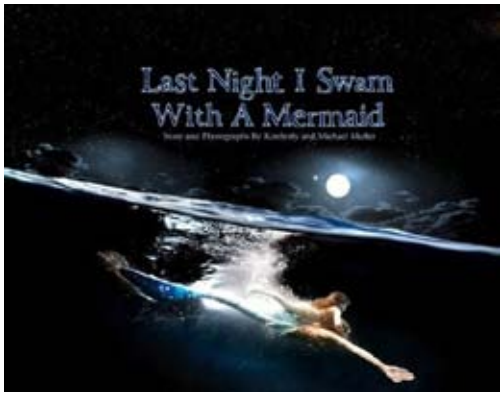


to bring a story to life. The result is a reading experience that no iPad or other form of digital media could deliver.

DIVE THE WORLD – The International Dive Magazine is a completely new idea in dive publishing. DIVE THE WORLD is purely a magazine for the traveling diver who enjoys easy tropical diving, marine life encounters and exotic adventures.

www.dtwmagazine.com

Last Night I Swam With A Mermaid



Last Night I Swam With A Mermaid is a magical children's tale spun by author Kimberly Muller and brought to life by her husband, world-renowned photographer, Michael Muller. Together they have created a world in which a young girl meets a beautiful mermaid who takes her on an unforgettable ocean journey.

As the adventure unfolds, the valuable lesson to respect and protect our planet is translated. Fittingly, the book will be available for purchase starting on Earth Day, April 22, 2012, at select retailers and online at

www.lastnightiswamwithamermaid.com

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Shooting mermaids

with Chris Crumley

Hasselblad asked American photographer Chris Crumley to illustrate their recent H4D-60 campaign with some legendary shots of legendary creatures using a camera that they believe is a legend in the making.

Virginia based photographer Chris Crumley has a successful career in commercial and advertising photography, but in recent years he has made a name for himself in a very unique niche: underwater Mermaid photography. For the H4D-60 campaign, Chris shot some Mermaid shots using a Hasselblad H4D-60 in an Ultima Underwater Housing.

"I love being and shooting underwater. About 25% of my work is in water, the rest is somewhat typical commercial and advertising; architectural, interior design and food work in Virginia and the eastern U.S.. I took my first underwater images in 1979, using an SLR in a plastic bag. That approach left a lot of 'room for improvement,'" says Chris, "that is to say they sucked. I thought if I could breathe underwater, I could get a better result. That led to scuba certification classes so I could get underwater breathing air."

Chris now runs a decidedly more advanced operation, very high tech, and his studio is currently home to numerous high-end Macs with over 40 TB of on-line hard drive storage and his own custom built underwater shooting arena.

"In 1998 I built a cyclorama-like 22,000 gallon pool for doing underwater illustration work. It has medium gray walls and floor to make post production retouches easier."

That hasn't kept him from the open waters, however, and in 2002 Chris was awarded SSI Platinum Pro 5000 Certification for having logged over 5,000 dives. To date Chris has carried out over 6,000 open water dives; only 7 without a camera.

So how did the Mermaid shooting come about?

"Some years back," Chris explains, "I was working with a model

in Mexico and we started – for some reason – talking about mermaids. One thing led to another and we had a fashion design professor at an Illinois University design and fabricate our first tail. My idea from the start was just to use the whole Mermaid thing to create an interesting portfolio. The plan was for it to sell diving and underwater photography skills to advertising agencies needing underwater fantasy-themed ad images."

His specialization in underwater shooting has proved very popular and he now has what is perhaps the largest collection of realistic underwater mermaid images in the world, covering everything from studio shots in the specially designed pool to location shots in underwater environments around the world.

"In the last few years," Chris says, "The Mermaid thing has grown significantly. And in the last 6 to 9 months it has caught on fire! In the past few weeks, I've done four book covers and a Norwegian auto ad, all centered on the Mermaid theme!"

"Shooting underwater, however, is both a blessing and a curse. There are a numerous obstacles to overcome. The optical difference between air and water is huge. Water affects color, contrast and visibility. Red and yellow colors begin to disappear when deeper than 2-3' so artificial light is needed to restore the color. Lights, along with everything else, needs to be waterproof and salt water corrosion-resistant. Scuba gear must be transported and maintained. It is truly life-support gear and its use must be second nature. With the human body at 98.6 degrees farenheit, water at anything less becomes chilling (or freezing) in a short time. I can wear a wetsuit or drysuit, but

the models might not be so lucky. Underwater models must love their job – and the water. They also need to be comfortable underwater and even for pool work, it's helps if they are scuba trained. Once the model is on a breathhold set underwater, I have 10-20 seconds to shoot before the model needs air. So for each setup, even with the fastest firing strobes, I usually only manage to get four to six frames at a time."

"Naturally shooting underwater requires a housing that you can trust your very precious gear to. Most have leak detectors, but a single hair across the sealing O ring is enough to let in enough water to destroy your camera. So you really have to be careful and use good gear. Until Hasselblad approached me for this shoot, all of my underwater shooting was done using 35mm film and DSLRs. I had, around 1988-90, begun using my first Hasselblads (an ELX and SWC) for dry work, however, and was keen to get them into the water."

"Shooting with the H4D-60 was a joy. It was just like an extension of my hand. Very easy to use. And the resolution! Wow! I also liked the True Focus feature. My H3D-39 doesn't have the feature, so I wasn't familiar with it. But, I learned to use it quickly and it worked perfectly. I could focus on an eye, and then reframe the shot and trip the shutter. It helped me nail the focus every frame."

"During this shoot, I had no issues whatsoever, the system worked perfectly. It's just as easy as any DSLR, but with, once again, that incredible sharpness and resolution. An amazing amount of detail. Even underwater, the sharpness of the model's hair was extraordinary."

www.chriscrumley.com
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Nikon D4 Underwater In Iceland

with Alex Mustard

I am sorry that I have not had a chance to write much for UWP recently. I've even heard rumours that I've had a falling out with the Editor! So I am pleased to be back in these hallowed pages with a field report on Nikon's new flagship SLR, the D4, which I had the chance to put through its paces in Nauticam's new NA-D4 housing.

The D4 camera is brand new and is still backordered at most retailers. Despite this, Nauticam already have a working pre-production housing and since the D4 is promoted as pushing limits, I headed up to the cold waters of Iceland to hopefully give it (and me) a thorough workout.

A brand new Nikon flagship is a rare treat and the new technology it ushers in is of interest all Nikon shooters because much of it will be handed down through their range (almost immediately so, in the case of the much anticipated D800). The D4 is aimed at the professional shooter, promoted on speed, accuracy and reliability. But Nikon's "ultimate imaging machine" comes with a scary price tag ($6000 USD). The headline specs are 16MP FX sensor, ISO 100-12800 (expandable), updated AF system, EXPEED 3 image processing allowing shooting at 10 frames per second for 100 RAW files, full HD video (including uncompressed HDMI output) and much more.

The raw stats suggest a significant, but not revolutionary, upgrade on the D3 series. However, shoot the D4 and you quickly realize that small improvements across the board add up to big returns. This is not a measurebator pleaser, but a photographer's camera. Shoot the D4 and it is much larger step than I expected on paper. For actually getting the shot, capturing that decisive moment, this is demonstrably the most capable camera I have ever used. But is the D4 the ultimate underwater camera?

Nauticam's NA-D4 also represents an evolutionary, rather than revolutionary design, which I believe is the correct approach. The D4 is a professional tool and I am sure all users want a system that will remain

The Nikon D4. 16MP, 10FPS, expanded ISO 50-204800 and full HD video. Built like a tank!

The Nauticam NA-D4

I favoured AF-C for both wide angle and macro, using the 3D tracking mode for macro and Auto-Area mode for wide angle. This worked well even with rectilinear lenses, where focus can be crucial for corner sharpness. Nikon D4 + Nikon 16-35mm. Nauticam NA-D4 housing, Zen 230 dome. ISO 800, f/14, 1/50th.

as reliable as possible in two or three years time. The NA-D4 utilises many design solutions already tried and tested in production on existing Nauticam housings. Expected retail price is $5100 USD.

Nauticam DNA permeates the design: confidence inspiring port lock and housing latches, thumb paddles and levers to access important push button controls, user interchangeable viewfinders and their new multi-selector control (which was not connected on the test housing I tried).

Nauticam have built an enviable reputation for putting in the extra effort with housing controls to make shooting their housings as easy as possible. A good example on the NA-D4 is the ISO lever, which falls beneath your left thumb and greatly facilitates changing ISO, without removing your eye from the viewfinder. This control actually operates a push button, low down on the rear of the camera. This is a particularly useful control on the D4 because the camera performs so well over such a wide range of ISO values that you change ISO frequently, varying it as just another control of exposure.

The most important controls on any underwater housing are those that access the shutter, shutter speed and aperture (and also change other settings when used with menus and push buttons). The fine performance of these primary controls is usually a major differentiator between a box that keeps your camera dry and a fine housing that increases both the chances of getting the shot and the enjoyment of using it.

The NA-D4 uses Nauticam's double-geared shutter release that gives excellent fine control. I really like the aperture control wheel (front or secondary control dial), which is a step on again from the last Nauticam I reviewed, the NA-D7000. It is perfectly positioned to be easy to move with one finger and turns freely and precisely, even when wearing gloves (with numb fingers inside them). The shutter speed (rear or primary control dial) is also very impressive and easy to rotate with just your thumb. I find it is easier to reach when I have my left hand on the other handle, than when I hold the housing in just my right hand (this may be because I had spacers fitted to the handles).

The four thumb paddles (two each side) provide ergonomic access to some of the camera's most important controls. On the right these operate AF-ON and video record and on the left image review and INFO. I use AF-ON focus frequently (where autofocus is not activated by the shutter button, but only by the AF-ON button). I find this very useful for big animal photography, split levels and super macro. Video record is not essential on the D4 because through a custom setting we can use the shutter release to start and stop video recording (when in video mode). The INFO lever is also a welcome addition, much more easily reached than a button placed low on the rear of the camera. The INFO button is particular important on the NA-D4, which lacks a window for the camera's top LCD screen.

One annoyance with the D4 controls is that autofocus modes are controlled from the old M-S-C switch (a change introduced with the D7000). This is less easy to use underwater than the old switches on the back of the camera (that D200, D300, D2 and D3 users will be used to). Memory cards can be changed with the D4 in the housing. But to change the battery you need to remove the camera from the housing and take it off its tray.

The D4 produces stunning images, moving the game on significantly from the cameras it replaces, the D3 and D3s. But costing twice as much as the D800 does not make it twice as good as an underwater camera. Nikon D4 + Nikon 16mm. Nauticam NA-D4 housing, Zen 230 dome. ISO 800, f/14, 1/160th.

Video controls are easy to access, making it simple to switch to liveview mode for both video and still shooting. Autofocus in liveview is very impressive, as good as the best compact cameras and liveview shutter lag is short. However, I still think it is best to shoot most video with fixed focus (using the AF only to acquire focus).

The test housing came with a single electronic synch socket and dual fibre-optic synch ports. Apparently the fibre optic ports can be exchanged for electronic ones. Personally, I would like to see at least two electronic ports as standard on a pro-housing. I know many people use fibre optic synch these days, but many do not. Especially as the D4 does not have a pop-up flash and therefore requires a LED-microflash to trigger the fibre optics (although this will allow faster frame rates than using a pop-up flash would).

Furthermore the D4 has many options for connectivity, including uncompressed video output via the HDMI connector and an Ethernet connector, which allows the camera to be controlled remotely (theoretically from anywhere in the world via the internet, including from an App on iPad and iPhone). This has interesting possibilities for remote and polecam work. I would like to see some more connectivity options on the production

Details of levers for Image Review, INFO and ISO, conveniently positioned by Nauticam to fall under the right thumb, rather than having to push buttons.

Dynamic range is very impressive at low ISOs and reduces little as ISO increases. Nikon D4 + Nikon 16mm. Nauticam NA-D4 housing, Zen 230 dome. ISO 250, f/13, 1/400th.

he D4's autofocus is amazing for macro shooting, being particularly good in low light and through teleconverters. I've already got shots of moving subjects I would have missed with other cameras. Nikon D4 + Nikon 105mm. Nauticam housing. Subsee +5 dioptre. 2 x Inon Z240 strobes. ISO 200. f/29, 1/250th.

Nauticam housing.

Waiting in the water as the camera is passed down to you, this is an intimidatingly large and expensive system. But get it underwater and it sheds its bulk, feeling well balanced and easy to use. Surprisingly, perhaps, the feature that immediately stands out on the D4 is not a new one. The D4 uses the Multi-CAM 3500-FX, by name the same AF unit as on the D3 series, D700 and D800. However, the algorithms and processing behind this have been significantly updated and the performance is very, very impressive. The AF improvement from D2 to D3 was definitely smaller than D3 to D4.

The AF system is particularly good in low light, low contrast situations (it could almost have been designed for underwater use) and the improvements are particularly noticeable when using teleconverters or macro lenses close to minimum focus. Despite diving in dark northern waters, I found myself often shooting

macro without turning on my focus light.

For macro my favourite AF mode remains 3D tracking with AF-C. The tracking is improved by the new metering system that allows the camera's autofocus to track an object as it moves around the frame based on its colour, shape and pattern. A particularly good use of this feature is to focus on the subject and then re-compose the frame, using the 3D tracking to keep the "moving" subject sharp. In wide angle I found that Auto-area AF just worked all the time. I actually tried this on macro too and it was very impressive, although I still prefer the greater feeling of control offered by 3D tracking.

Flash-synch is officially 1/250th, although 1/320th works perfectly with underwater strobes. The D4 also offers a 1.2x crop mode (quite a few people like the Canon 1D series 1.3 crop with fisheye lenses) and this will synch to 1/400th. The DX crop mode (approx. 1.5) will synch to 1/500th.

As an aside, there is much excitement about the 16MP DX mode of the D800, but having tried the DX mode on the D4, this feature is limited underwater by how small the viewfinder becomes in DX mode (much smaller than the viewfinder on a dedicated DX camera).

The headline stats of the D4 involve its combination of megapixels, frames per second and ISO sensitivity. 16MP was chosen because that is what the professional shooters asked for. Prevailing opinion during the D4's development was that the current cameras (12MP D3 and D3s) actually had enough resolution for all publishing in books, magazines, newspapers and online and rather than more pixels photographers wanted better ones. With the D4 Nikon has delivered better pixels and also 33% more of them.

A modest rise in pixels means bigger advances in frame rates and high ISO performance. Shooting full-sized RAW files, the D4 can take 10 frames per second for 10 seconds without pause. Underwater this is of little use for coral reef photography, but could be highly desirable when shooting action like the sardine run, sailfish or fleeting big animal encounters. It should also prove useful for behaviour photography, using continuous lighting and higher ISOs instead of flash. Maybe we can get that frogfish feeding, now?

The ISO range is hard to get your head around (the expanded range is ISO 50 to ISO 204800). At ISO 1600 and below the images are completely clean. At ISO 6400 you need to pixel peep to see any noise (which in any case looks natural). Even at ISO 12800 they are completely useable in print. Noise is quickly banished by post processing. D4 files seem very flexible in post production. Underwater I did find I got more noise in the darks canyons of Iceland than I saw in photos under more normal (land) lighting conditions at the same ISO settings.

Anyway, I think we are too focused on noise when discussing high ISO performance. The latest cameras are all so capable, I believe the more important impact of increasing ISO is a loss of dynamic range of the image. This is where the D4 impresses me most over the D3 series - its ability to retain highlight and shadow detail at higher ISOs while still delivering strong colours and rich blacks.

In conclusion the D4 is a fantastic camera underwater, but its skill set exceeds our needs underwater. For underwater photographers that photograph in deep or dark places, or shoot action (like the sardine run or big animals, which are often at high latitudes) then the D4 will significantly

Iceland provides the chance to test the D4 and NA-D4 in tough conditions. Both performed faultlessly.

The D4 produces stunning images at high ISO without noise and with lots of dynamic range. Despite this scene looking bright it was not in reality in Iceland. Nikon D4 + Nikon 16mm. Nauticam NA-D4 housing, Zen 230 dome. ISO 1000, f/14, 1/80th.

The author shooting with the D4 and Nauticam housing in Iceland.

Nikon has already released two FX cameras this year and there are rumours of a cheaper, third one coming soon. But is FX best underwater? In a word, no. FX works well underwater but requires more discipline to shoot than DX, requiring the best lenses and domes to realise its potential. High magnification macro is more of a challenge too. A big problem is getting good corner sharpness with non-fisheye wide angle, which requires a large dome port and keeping the lens stopped down. Nikon D4 + Nikon 16-35mm @ 16mm. Nauticam NA-D4 housing, Zen 230 dome. 2 x Inon Z240. ISO 1600, f/13, 1/200th.

increase their capability to realize new shots. It shoots excellent macro too and despite being a high ISO king delivers leading dynamic range at low ISO. It is also built to take a professional workload and will produce files that exceed all publishing requirements.

However, alongside the D4, Nikon have also released the D800 with 36MP. A Nikon that offers 20MP more than the D4, for half the price. The D800 comes with almost identical AF and high ISO performance good enough for most applications. The D4 currently boasts world bests in frame rate and ISO sensitivity, but these are not features that all underwater photographers require. If you know you need optimum performance here then you probably already know you need the D4. Otherwise the D800 is smaller, cheaper, lighter and has pop up flash to drive optical TTL. Its 36MP look excellent value.

The D4 is an amazing camera, one that flatters the photographer producing excellent image quality irrespective of conditions. Nobody that buys a D4 will regret it. However, the D4 costs twice as much as the D800 and it is hard to conclude that the D4 is twice the underwater camera.

Alex Mustard
www.amustard.com

I would like to say thanks Nauticam, Underwater Visions (UK), Reef Photo Video (USA), Dive The North (Iceland) and North Sailing (Iceland) for making this all possible. And a big thank you to Nina, Erla and Valdi for posing for pictures in very chilly Icelandic waters!

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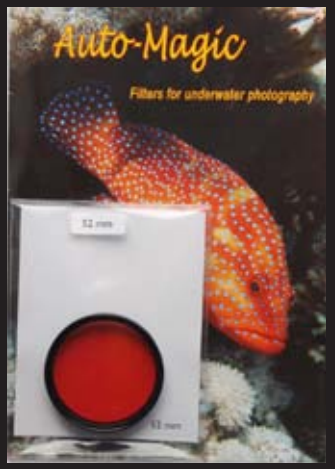

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Panasonic GX1 & Nauticam NA-GX1

by Peter Rowlands

The micro 4/3rds format has created a whole new genre of camera and, for once, it seems like it had underwater photography in mind when it was conceived. The larger sensor size offers improved high ISO performance compared to standard compact cameras for shooting in low light conditions whilst the image processing performance produces images that compete favourably with much bulkier and heavier SLRs. Add lens interchangeability and you have a combination for underwater photographers which is very convincing.

Normally when reviewing cameras and housings I have always left the price til last, feeling that that piece of information is the final piece you need to complete the jigsaw of decision but in the case of the Nauticam NA-GX1 I think you should know that this housing retails for just under £900 (body only) and at that price you should really be thinking of reasons why not to buy this housing!

In terms of the camera performance the GX1 has got it all and, quite honestly, I can't think of what the manufacturers can improve to tempt us to upgrade. 16 megapixels, full HD, fast autofocus, manual and auto exposure control and impressive high ISO performance and all, depending on the lens you use, in a size which won't make your pocket bulge. Top that. If you need more specific details I recommend the excellent www.dpreview.com.

The NA-GX1 housing is really quite remarkable and, for the price, it is quite extraordinary. How the team at Nauticam have managed to get all of the precision mechanical controls into such a small size package is incredibly impressive. As someone who dabbles in design I am embarrassed to admit that this review has taken me much longer to complete as I found myself breaking off from typing just to handle the housing again, to push a control and see how its placement has been achieved and how that contributes to the ergonomics; turning the focus/zoom knob and feeling there is virtually no slack in the gearing and just looking at the proportions which make what is effectively just a box into an elegant combination.

I tested the camera with the newly announced Panasonic X Vario PZ 14-42mm which is very compact. This will be of great interest to underwater photographers because Nauticam plan to produce a port for it with a 67mm front thread. This opens up a wide choice of external wide angle and macro lens options.

Sadly my time with the camera and housing was all too limited but I am hoping to be allowed some water time with this combo before the next issue of UwP so I will report back and I suspect that the warmth I feel towards this combo will not be diminished by water temperature at this time of year.

Peter Rowlands
peter@uwpmag.com

Narked at 90 delrin port cover for Nauticam Mini Dome ports

By Peter Rowlands

Question: How many knees and hands does it take to fit a Nauticam neoprene dome cover? (All Nauticam dome port users will know this)

Answer: 2 knees to hold the camera housing and 2 hands to fit the cover securely. Its elasticated sides are designed to hold the cover nicely *when it is correctly positioned* but get one of the sides or edges slightly off angle and it slips off like a proverbial eel.

Enter the solution, well at least for one of Nauticam's ports – their Mini Dome. It's made by an engineering company in the UK called Narked at 90 and at £72 inc VAT (+postage) it's not cheap but I suspect there are Nauticam Mini Dome users who have stopped reading this now and are typing in their website address www.narked@90.com to order one.

As well as being machined from solid delrin these port covers provide a much more stable platform when the housing is turned face down to open the back and change batteries/ SD cards.

In a strange sort of way they transform the handling of the housing on land and provide total security once they have been slid effortlessly over the dome shade. The interference fit feels very snug and reassuring.

Let's face it the last thing you want at the beginning of a trip is a badly scratched dome port (especially for video users) so that price seems a lot better value already, doesn't it?

Peter Rowlands

www.uwvisions.com
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Fantasea FP7100

by Peter Rowlands

The Coolpix brand has traditionally been Nikon's mid level compact range but with the advent of the P7100 it has aimed it's sights directly at the top end which in the past has been dominated by the Canon G and Panasonic LX compact cameras. The result is a chunky, fully featured pro level camera with a high specification that will appeal to those who want the controllability of an SLR without the bulk.

I don't intend to delve into the camera's pros and cons as there are several excellent websites that provide such information and advice so if you are interested in this level of camera I'll suggest www.dpreview.com as a good start.

The Fantasea line of housings is a well established brand who have majored in housing Nikon compacts and the FP7100 is their latest for the Coolpix P7100. Just as Nikon raised their sights with the spec of their camera, so too have Fantasea upped their quality output with an excellent housing both in terms of moulding, construction, design and finish.

The housing is opened with a large oval turn button on the right hand side which has an integrated safety lock. The red lever is lifted away from the housing and allows the large button to be rotated anti clockwise to open the rear door and reveal the inner workings of the housing.

Most notable at first is the main double O ring seal, compression and piston. In common with most compact housings both sections are bristling with controls – push buttons, dials and wheels, which operate all of the functions of the camera. There

are as many controls as there are on most SLR housings so it's a wonder how they can provide all at such a competitive price. All of the controls are very clearly marked. In fact some of the most clearly marked that I have ever seen and that makes controlling the camera much quicker and more accurate.

Loading the camera is a piece of doddle. Fantasea recommend removing the camera's strap lugs but in practice, if they are lifted up, they don't get in the way. Then all you have to do is lift the front mode dial and feed the camera into the front of the housing where it is held very precisely in 8 padded supports and four front posts. All but 3 of

the controls auto locate and these are the three control wheels which, when turned, it shows up on the LCD screen what setting has been chosen so it's not a problem. In reality it doesn't take a second to align these controls and the liklihood is that once it's done you won't need to realign them again.

There are 2 ways flash lit photos can be taken. The first is with the built in strobe and, to get even coverage, you need to attach the large front diffuser. The second is to fit the supplied double fibre optic cable plate to trigger external strobes for more controlled lighting.

Fantasea produce a range of accessories to make this a true system camera so it can be expanded to suit your photographic needs. The housing is 18 x 15 x 13.5 cm in size. On land, with the camera inserted, it weighs just 1.2kg which in saltwater becomes 0.3kg negative.

At $574.95 the Fantasea FP7100 is the least expensive rigid housing on the market and I would argue that it is the market leader in terms of quality, performance and therefore value for money.

Peter Rowlands
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Movie lights or strobes?

By Peter Rowlands

With camera technology converging to provide stills cameras which can shoot excellent video and LED lighting technology emerging to provide ever increasing light output, it's timely to consider whether continuous lighting is the best way to illuminate both still and video.

Let's go back to basics for a minute. Traditionally, artificial light for stills has been provided by electronic flashguns; also known as strobes. They emit a brief pulse of light timed to coincide with the camera's shutter being open. The result is an underwater scene, captured in a fraction of a second, with all of the colour restored. Video on the other hand captures movement by recording several sequential frames per second. The more frames per second, the smoother the footage will look but, for arguments sake, a typical frame rate is 25 per second. Lighting each of those consecutive frames with an electronic flash would not be possible given that they need to recharge their capacitor before being able to emit another pulse of light. The solution is to use continuous light.

At this point I want to explain basically how artificial light is generated and quantified because once the penny has dropped it will stand you in very good stead. OK. Here goes.

Traditionally artificial light was generated by heating a thin filament of metal with an electrical current. The more power that was applied, the brighter (or hotter) the filament became. In addition the colour changed as the filament got hotter. The temperature of the filament is described in °Kelvin (40°C is equal to 313 °K) so °K became a figure to describe colour temperature. When a small amount of power was applied to the filament it got hot and glowed red at a temperature of about 2000 °K. At 3400 °K it glowed orange then at 5600 °K white (or the equivalent of daylight) followed by blue at 7500 °K.

In the past artificial light has been provided by halogen bulbs which were available in a variety of strengths requiring ever larger battery packs as the output increased. One downside of these bulbs was that their most efficient temperature to run at was 3400 °K which produced light output with an abnormally orange or 'warm'

A pair of LaLuz 800's on a Nauticam Panasonic GH2 with Ultralight arms makes a neat, light and versatile outfit. The settings for the shot were 1/100th @ F5.6 with ISO 1600 so that's less light than even a small strobe would give but continuous lighting can be used for stills or video. The light cut off point can clearly be seen on the right of the frame.

The optical design of the LaLuz 800's produces a very directional light with distinct shadows.

The 6000°K colour temperature is virtuanlly identical to daylight. 1/50th @ F8 ISO 1600

tint to the areas it lit.

This could be balanced by adding a slightly blue 'cooling' filter over the light but this in turn reduced the output slightly.

Fortunately today's LED lights generate light in a completely different way and have an output around 6000 °K which is very close in temperature to the daylight 'film' we shoot today. The result is an even balance between artificial and available light.

As LED technology has developed so has the light output and now we're at the stage where it is sufficient to be used for stills photography especially with the improved high ISO capabilities of a lot of digital cameras.

Underwater LED light output is achieved on one of two ways; either with a bank of LEDs or by optically concentrating the light from a single one. The former produces a softer edged, usually wider coverage whilst the latter produces a circular output with sharp cutoff.

I have had the opportunity of using two LaLuz 800's here in the UK for a while now and for anyone who likes to shoot both stills and video on the same dive they offer a very workable solution for all but the widest of lenses. I did a dry review of these lights in UwP64 so I won't go over old ground.

From a stills point of view it's quite reassuring to see what effect the lights are having before pressing the shutter but with the instant feedback of digital cameras this is much less of an advantage than it used to be. In terms of light output these 2 lights were enough to give a typical exposure of 1/100th @ F5.6 with ISO 1600. This is obviously far less than say an INON Z240 strobe would give but conversely the INON is no good for lighting video footage (they have their own range of LED lights for that!).

At $199 plus shipping the LaLuz is very good value and a pair would obviously cost $398 which is significantly less than a Z240. In addition a single

An optical LED light is much smaller and lighter than a small strobe but not as powerful or as wide an angle

Light output is achioeved by either an array of LEDs (left) or the optical focusing of a single LED (right) which provides a small, lighter and cheaper package.

LaLuz 800 is more than adequate as a focusing light.

In conclusion I doubt if LED light output will ever match that of a strobe but they are now at the stage where they should be given serious consideration for the still/video shooter.

The ideal of course would be a strobe which uses a LaLuz as a built in focus light…. Ikelite produce the DS161 movie strobe which has a 500 lumen focus/video light but the angle is only 45° compared to the 80° LaLuz. Whilst I wait for the perfect strobe/light combo maybe the simplest solution is to mount the LaLaz 800s on my strobes to give me the best of both worlds.

Peter Rowlands
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As you know, the current issue of Underwater Photography is free to download but all of the previous issues, going right back to Issue 1, are still available to download for just 99p per issue.

It's a fantastic reference library chronicling all that has happened in underwater photography over the past 10 years.

Buy back issues here

Olympus 12-50 update

by Dan Bolt

We left the first part of this review with the promise of photos from a trip to the Maldives, sadly that didn't happen due to me getting a chest infection and being declared unfit to fly or dive on the day I was due to fly - sorry about that.

Happily though I regained the use of my lungs in time for a week in Scotland's sea lochs so I am now able to give you a more rounded view of this versatile little lens. In fact I'm sitting in the bar of the Loch Carron Hotel in north western Scotland as I type this piece so please forgive any 'smelling pistakes' the beer is rather good!

This morning I dived the Strome Castle slipway at the entrance of Loch Carron; a very narrow, and therefore fed by very strong currents part of the loch, but home to a bed of rare Maerl (calcified seaweed). The habitat is home to many brittle-stars, hermit crabs and Flameshell molluscs, another rarity.

This is exactly the sort of dive where I see the Olympus 12-50mm being the lens of choice; a dive where you are not too sure what you will encounter and might not have the chance to revisit too often. Due to the tidal currents this spot can only be dived twice a day, and with a string of other sites to visit this week our dip this morning could have been the only chance to record what was going on down there.

Having read part 1 of this review you'll already be aware of the potential of this lens. In fact I've never had as much interest in any other articles I've written for UwP so I know there are a good number of you seriously looking to get hold of one.

All I really have to add to part 1 is that the guru who is Peter Rowlands was spot on when he suggested I try a +2 dry dioptre inside the Zen dome. What a difference that made; suddenly the minimum focus distances came right down and the true potential of this lens was apparent. At the 24mm end you can focus to about 15cm and out at the 100mm setting it's a fish-pleasing 50cm. This was all very nice, but the most dramatic improvement was seen when using a Subsea +10 dioptre at 100mm.

I am hugely impressed with the macro capabilities when using this combination. It gives sharp images with almost no chromatic aberration and a usable depth of field coupled with a working distance of about 25cm. All these dioptres give a fairly narrow focal-band (ie from 25 to 30cm) but when you find a subject of about 3cm you can rest-assured that the image quality will be awesome.

As things stand at the moment you will have to make your own zoom gear.

Painted Goby. 1/60th, f/22, iso320, 100mm, Subsea +10, 2xYS110a strobes

Mustard Fish. 1/60th f/5.6, iso320, 24mm, 2xYS110a strobes

Feather Star on Maerl. 1/60th, f/13, is320, 40mm, 2xYS110a strobes

During today's dive I was able to shoot diver portraits (it's a shame I only had Alex Mustard as a model! hard times), animal portraits and macro photos all in the flick of a switch, a very happy chap I was when I surfaced! Therein lies the appeal of the Olympus 12-50mm; true versatility coupled with very good image quality in a light and compact package. Adding to the appeal is the fact that a matching port already exists which can also be used with a range of other lenses (14-42mm and 9-18mm).

As things stand at the moment you will have to make your own zoom gear. I've cut a 4cm strip from another gear (actually from the 9-18mm lens, you'll need to shave the thickness down to about 4mm) and glued it to a moulded piece of white plastic (actually from a divers-slate), about 4cm square. I then use the lens in e-zoom mode which means I only need a coupe of cm of travel, and tape the gear to the zoom lever.

I've still got a few days left diving the awesome sea lochs and if I'm not shooting wide-angle (using the Panasonic 8mm fisheye), I will be using this lens simply because I know I can shoot anything I may stumble upon. From a small clingfish or nudibranch, right up to a conger eel or Mustard-fish I've got it covered.

A final note is just to say a big thanks to Dave Black from 5 Bells Diving without whom there would be no week-long diving trips to Loch Carron.

www.5bellsdiving.com

Dan Bolt
www.underwaterpics.co.uk

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Enhanced viewfinders for EVF cameras

by Phil Rudin

In the past three years the mirrorless camera market has exploded world wide with what seems like a new model offering coming almost monthly these days. Mirrorless cameras now come with excellent sensors that produce image quality every bit as good as the top APS-C DSLR cameras. Auto focus speeds have improved greatly assisted by new high quality lens offerings and dramatically better LCD screens. With the introduction of the Sony NEX-7 and Olympus E-M5 cameras a new level of quality has also been reached with the newly designed Electronic Viewfinders, (EVF_s). When first introduced the mirrorless cameras were looked upon by most as a way for consumer compact (P&S) users to step up from entry level cameras to the more versatile interchangeable lens verity. Still most users were dealing with finding sharp focus on the LCD screen and longer shutter lag times than current DSLR model cameras. These issues are no longer a concern for the recent crop of mirrorless cameras. The old LCD_s have been replaced with much improved units and shutter lag is no longer the issue that it once was.

Now with the over 2 million dot EVF finders, focusing through the viewfinder is as easy as with any DSLR camera. EVF cameras also have some real advantages over optical viewfinders especially in sub 35mm sensor cameras. With optical viewfinders the size of the image in the finder is reduced as sensor size is reduced. This is not the case with the EVF_s so when you look into the viewfinder on the NEX-7 or E-M5 the image that appears is much larger than it would be had the same sensor size been used with an optical viewfinder. With the NEX-7 the images size is slightly less than that of a full frame 35mm camera and it covers a full 100% of the image being recorded. In addition the image in the viewfinder changes as the cameras settings are changed. So if you over lay a full range of camera information it will show in the viewfinder. If you change F/stop or ISO you will see the change from lighter to darker happen in real time. You can add grids (think rule of thirds) and they will appear in the viewfinder. If you apply any of the "ART" filters like black and white or high saturation the effect will be seen in the viewfinder before you snap the shutter so you will know what the finished image will look before it is taken. If you apply in-camera stabilization you will see the effect in the viewfinder. The down side to all of this technology of course is a greater drain on the camera battery. Using the EVF full time on the NEX-7 I have shot over 275 images without killing the battery while shooting macro. The viewfinder also shuts down to conserve battery life when

Jawfish with eggs, NEX-7, Nauticam NA-NEX-7 housing, 30mm macro, Athena ring-flash, ISO 100, F/10, 1/160th

Nauticam NA-NEX-7 housing with the 45 Degree finder, note that it blocks part of the view to the LCD screen

Mantis Shrimp, NEX-7, Nauticam NA-NEX-7 housing, 30mm macro, Athena ring-flash, ISO 100, F/22, 1/160th

Sharptail eel, NEX-7, Nauticam NA-NEX-7 housing, 30mm macro, Athena ring-flash, ISO 100, F/11, 1/160th

not used for several minutes while looking for the next great subject to photograph. This is a minor issue to me as it turns back on almost as soon as you hit a button. If I were shooting fast moving subject I would switch to the LCD screen to pan with the subject. To complement the EVF housings are now being designed which make use of the outstanding enhanced viewfinder from Nauticam. The Nauticam NEX-7 housing has a replacement LCD window which will accept both the Nauticam 45 degree and 180 degree viewfinders. This is a user installable LCD window that can be changed in the field to replace the pickup finder window which comes with the housing. The 45 and 180 degree finders can then be installed into the new window in under thirty seconds. As always I strongly recommend that a dunk test be done after installing the LCD window and viewfinder. This should be done BEFORE the camera is placed into the housing to check for any leaks from improper installation. The Nauticam enhanced 45 and 180 degree finders provide a clear and bright undistorted 1:1 image of the cameras viewfinder. The advantage of this viewfinder is to assist in precise accurate focusing and allow for better image composition. To assist with personal vision issues the Nauticam finders sport an external knob for diopter adjustment inside the viewfinder. This allows long-sighted and short sighted photographers to make adjustments while underwater. I prefer the 45 degree finder for macro and the 180 degree finder for faster moving wider angle subjects. The 45 degree finder allows the diver to stay above the camera while shooting near the bottom or near fragile subjects. In this position above the subject the photographer less likely to cause damage to the subject and its surroundings.

These enhanced finders are the same ones being used world wide on many makes of DSLR housings. When mounted on the NEX-7 housing the viewfinder appears very large compared to when mounted on the mostly larger DSLR housings. Even with the enhanced finder the total size of the housing package is quite small compared to most DSLR housing. This is one of the many reasons that the mirrorless cameras are well suited to U/W photography. I found the NEX-7 OLED viewfinder and Nauticam 45 degree finder worked very well together. I was able to see detail in subjects not possible with the stock pickup finder provided with the housing. I have used the Inon 45 degree finder for years with my DSLR and I found the NEX-7 combination to be better in several areas as a result of both the excellent OLED EVF and the Nauticam viewfinder. With the arrival of the Olympus EM5 I would expect to see more housings coming into the market which will take advantage of these enhancement finders for EVF_s. The Nauticam NEX-7 housing lists for around $1850.00 in the US, the LCD replacement window is $240.00, 180 degree viewfinder $1150.00 and the 45 degree viewfinder is $950.00.

Phil Rudin

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Light Loss

by Rob Cuss

I volunteered to give a talk to my topside camera club entitled "Underwater Britain: A colourful place believe it or not..." My passion in underwater photography is showing the general public how wonderful the underwater world is in their own back yard and to let fellow divers know that you don't have to go to the Red Sea to see wonderful things underwater.

I talked to a few friends that had done similar talks and all seemed convinced that a short introduction on the challenges of underwater photography was necessary. I included a slide that had a comment on it that underwater photography in the UK is like photography in fog, another that light drops off quickly with depth and one that the red part of the spectrum quickly diminishes – all elementary facts. To make sure the talk was fit for the general public I ran through it with a topside photographer friend and was somewhat taken aback when challenged on the facts stated above "how quickly does light drop off? How much red disappears?" I couldn't quantify it and had to resort to the teacher's favourite of "I don't know, so I'll find out for you."

I went away and thought a quick Google search would come up with the required info, but it didn't; not just for the green water world, but not much to speak of for blue water. At this point I should point out that my day job is research science, so I'd have to devise an experiment and get the results myself.

My methodology was simple and I'm sure some would argue was flawed. I sacrificed the start of a dive I was doing at the inland dive site at Stoney Cove, UK, by descending a shot line from the surface to a depth of approximately 20 metres. I set my camera (Nikon D80, Tokina 10-17mm in an Ikelite housing) to "P" mode at ISO200 and continually took pictures of my arm, wrist slate and computer at regular intervals along the shot line. I was careful that the shot was similar each time and that the camera to arm length was consistent and the camera was always pointing horizontally. Fortunately the weather conditions on the day were consistent and I am confident that the topside light levels did not alter during the quick 5 minute experiment.

The camera was acting as a light metre and I could get the shutter speed (S) and aperture (A) from the EXIF file data, whilst the photo of my computer gave me the depth. Little

Nikon D80, Ikelite housing, Tokina 10-17mm at 10mm. ISO 400 1/8th sec @ F3.5

(Above) Stoney Cove, UK

(Right) My left arm.

had I appreciated how slow the shutter speed would get and several of the 15 images I took were very blurred, but I could just about read my computer depth reading. I also got the histogram information for red, green & blue (RGB) and shade to be able to see the loss of colour.

Taking the S and A values the Exposure Value (EV) of each photo is calculated as:

$$EV = \log_2\left(\frac{A^2}{S}\right)$$

and

$$EV_{relative} = EV_{surface} - EV_{depth}$$

The day was quite sunny and at the surface EV had a value of 14. As you can see from Figure 3, I took my first photo at about 6 metres depth and already 5 stops of light had been lost! Let's put that into context, if conditions at the surface are giving shutter speeds of 1/250th second, at 5 metres depth shutter speed would have reduced to 1/8th second; and camera shake would be a problem.

By 20 metres depth nearly 10 stops of light have been lost and in anybody's book that is a big drop in light. The data also suggest that light is dropping off about a stop every 3.4 metres (11 feet), which really puts into context how stunning the work of the deep wreck photographers is in such low levels of light. Ordinarily we'd switch our strobes on, but there are times when that solution isn't going to be the best option.

When I did this little experiment I thought it would be pretty useless information, but I've since started to use it to help newcomers. Many divers in the UK start out with housed compacts and take them to beautiful sunny climes, then bring them back to the darker temperate waters of the UK and wonder why they can't get good results, most often through blurring. I simply ask them to take a photo at the surface and see what the ISO, S and A readings are for their cameras, we then go through the numbers and try and take off 10 stops and it then sinks in that this is getting into difficult territory and that hand-held natural light photography is very tricky; "So that is why my shots are getting blurred!"

Figure 1 shows the results from the loss of colour. The loss of colour with depth is simply a plot of the average values from the histogram (data from Figure 2). Although I know it is obvious, I was still surprised that 80% of red had disappeared by 5 metres depth. I think the confusion in my own mind has always come from the teachings that ALL red disappears. I remember a long debate on a trip to the Ras Mohammed National Park in the Egyptian Red Sea where there are red anemones at 20 metres depth. So if I've been taught that all the red has gone, why can I still see red at that depth? My drysuit also has red arms and I can clearly see the red at 35 metres depth on a wreck in Scapa Flow. Our eyes and brains must be powerful at processing this spectrum change and it will be some time before camera sensors can resolve these low levels of red.

The data also confirm something that is obvious to us in the UK. By 20 metres we've only lost 20% of the green, whereas we've lost 80% of blue and almost 100% of red, giving us the beautiful emerald greens we see in temperate waters. I often make my monochrome photos taken at depth from the green spectrum and this shows why that gives the least noise. I had always put this down to the fact that there are twice as many green pixels than

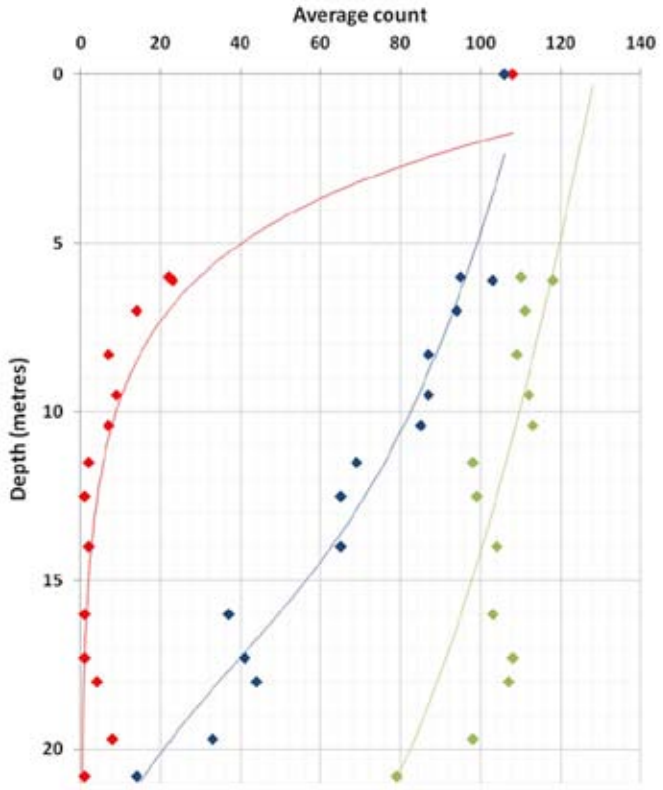


Figure 1

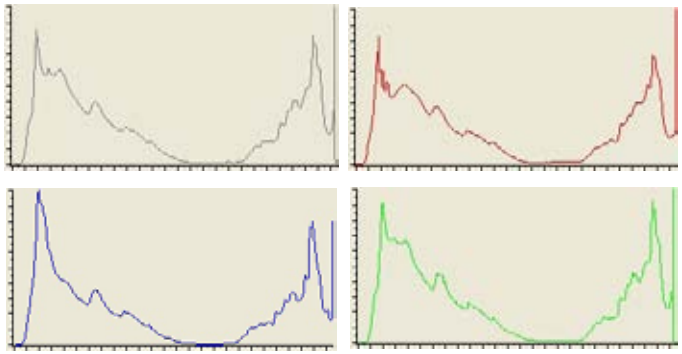
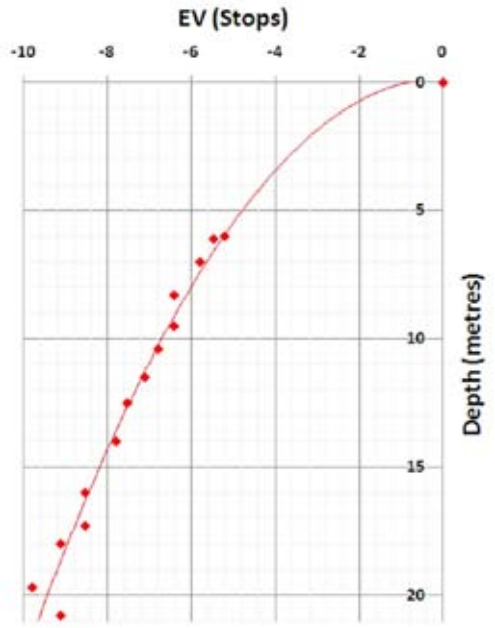


Figure 2



red or blue in the Bayer pattern used by most digital cameras sensors. The blue end of the spectrum should also be the one that is last to be absorbed, but the phytoplankton in the water results in the blue wavelengths of light reducing.

So is this information actually any use? I have already used it in explaining concepts to newcomers to underwater photography and they seem to have understood what I was saying. I've also used it to gauge what sort of photography I can achieve on a given day. I enjoy the liberating feel of natural light photography from time to time and for wreck photography it can often be the only available technique to get the shot you want.

Taking a photo on the day to see what the light level is topside means I can now see if loosing 10 stops of light is something I can live with and on those cloudy over-cast days it helps to make the mind up and switch to macro if close-focus wide-angle isn't possible.

So are we fighting a losing battle with physics? Absolutely not! The wreck and pike shots are natural light shots taken in Stoney Cove at different depths. Pike tend to stay shallow and in about 5 metres of light the loss in red can easily be restored to give pleasing natural light photos. At depths of 20 metres (wreck shot) photos in Stoney Cove appear green, but with careful manual white balance or post-processing from RAW files, the blue and red can be restored to the images. Although not immediately obvious in this photo, the red on my buddy's wing is visible even at 20 metres.

The same physics is also going to be at play in balanced light photography, only we add artificial light to illuminate our foreground, whilst the background lacks red. I find that my close-focus wide angle photos are a lot easier to white balance in post processing when at shallow depths, as it can be difficult to balance the full colour spectrum in the foreground with a restricted background spectrum.

I make few apologies if this article is too technical. I hope the information in it is useful to at least one other person. I should note that the result is dependent on water turbidity and that different locations may give different rates of light drop-off. Maybe someone could do a similar experiment in the blue water of the tropics to see if it is similar. I can now explain underwater light levels in a quantitative way that has become second nature to us where previously it was only described in a qualitative manner.

Dr Rob Cuss

Dr Rob Cuss is a keen underwater photographer and founder of the East Midlands Underwater Photographers.

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Diving Spain's Costa Blanca

with Phil Rudin

When I mention European diving to most of my Floridian friends here in the US they immediately think of cold murky water and wreck diving. The truth is that Europe has some of the most devoted divers I have ever met and some of the most diverse diving on the planet. One such diving location is the picturesque town of Calpe on Spain_s Mediterranean coast.

The city of Calpe is located on the Mediterranean Sea in a coastal area known as Costa Blanca siting 61 km (40 miles) north of Alicante and 125 km (78 miles) south of the Valencia. Airports are located in both of these major cities along with Madrid and Barcelona which are both 460 km (285 miles) from Calpe. Frequent bus and train service to Calpe is available from all of Spain_s major cities.

I chose to rent a car and made the drive south from Valencia using the outstanding costal highway system for my five day stay. Calpe has a population of around 12,500 and sits at the base of Penon de Ifach (Ifach Rock) an immense white limestone outcropping which rises 332 meters (1090 Ft.) above the the Mediterranean. Ifach Rock is a protected natural park which towers over Calpe and separates two beautiful white sand beaches. Too the north much of the coast line is dotted with rugged cliffs some reaching as high as 100 meters, these rock formations are separated by many secluded white sandy coves were sunbathers abound during the tourist season.

Some of the diving is focused around Ifach Rock, at sites like Los Arcos where huge chunks of limestone line the sea bottom forming large caves, caverns and arches. The depth in this area ranges from about 10 to 40 meters and is most easily accessed by boat. Visibility averages around 20 meters and I had dives where it well exceeded 30 meters.

(Top) RECOVERING DIVERS Olympus E-330, Olympus PT-E02 housing, 8mm fisheye, ISO 100, f/9.5, 1/250th

(Right) ELEPHANT CAVE ENTRANCE Olympus E330, Olympus PT-E02 housing, 8mm fisheye, ISO 100, F/4, 1/20th

ELEPHANT CAVE
Olympus E-330, Olympus PT-E02 housing, 8mm fisheye, ISO 100, F/5.6, 1/20th

RED STARFISH
Olympus E-330, Olympus PT-E02 housing, 8mm fisheye, ISO 100, F/13, 1/20th

MEDITERRANEAN-BLENNY
Olympus E-330, Olympus PT-E02 housing, 50mm macro+1.4 tele-converter, ISO 100, F/16, 1/250th, Athena ring-flash

Water temperature in the summer months runs around 27c (80F) and during my late September visit it had dropped to around 21c (70F) with air temperatures ranging from 18 to 35c (65 to 95F) depending on the time of year with September being quite pleasant.

Among the giant boulders surrounding Ifach Rock divers will find conger and moray eels, octopus, eagle rays, sting rays, a variety of fish including grouper, goldline wrasse, scorpion fish, cow bream, vibrant hard and soft corals, nudibranchs, sponges, anemones, scalps, sea-grasses and more. Large schools of barracuda, Dorado, dolphins and the occasional odd looking ocean sun-fish may also be seen in the open water areas around these rocks.

Along the rocky coast line north of Ifach Rock is Elephant Cave which has two cave entrances at the base of a towering limestone cliff. The first is a broad entrance found at 12 meters leading to a large well lit cavern. A second entrance at 9 meters leads much further under the cliff face to a wide cavern which opens to an immense open air space. If you climb out of the water a winding tunnel system can be explored on foot. Light enters the cavern from a large crack in the surface of the cliff some one hundred meters or so inland lighting up the large room below. As a photographer I would have been happy to spend a few days at this cave site just to explore the lighting possibilities. The sea bottom outside the cave is covered with sea-grasses and large rocks which made great hiding places for eels, lobsters and a wide variety of bottom dwellers.

Les Basetes Dive Centre a five star PADI instructor development center is one of several dive operations located along Costa Blanca and very convenient to Calpe and Moraira. Les Basetes is in a protected marina at the Harbor of Benissa just a

ORNATE WRASSE
Olympus E-330, Olympus PT-E02 housing, 50mm macro lens, ISO 100, F/9.5, 1/125th, Athena ring-flash

five minute boat ride from Ifach Rock and twenty minutes from Elephant Cave.

The dive center has an efficient and friendly staff teaching over fifteen training courses from open water to instructor in english, french, german, dutch and spanish. They have a full range of quality rental equipment which I used every day during my stay.

Diving is done from a pair of RIBs (rigid hull inflatable boats) both equipped with large outboard engines, ladders, radios and other safety equipment. Since most of the areas dive sites are within a five to ten minute boat ride of Les Basetes many dives are one tank outings with a return to the dive center for snacks and a tank exchange before heading out for a second dive. A large area outside the dive shop has several covered tables, drying racks for suits and equipment a place to lounge between dives and food is within a short walking distance.

Within a few meters of the dive shop you can enter the water for a shore dive along the Benissa harbor jetty which drops to about six meters. This jetty area is loaded with macro critters of all types plus small schooling fish, ells and much more. I found a number of small subject not found during the boat dives in this secluded bay area a twenty meter walk from the dive shop.

Les Basetes Dive Center is the only dive center in the Costa Blanca area offering daily dives from Benidorm to Javea along forty kilometers of coastline. This is also the only area dive center with boats just outside the dive shop doors. A six dive package including full equipment runs around €215.00 ($300.00) with price supplements for night dives and distant locations. Nitrox is available on site and can be included in multi day dive packages if needed.

For further information on Les Basetes Dive Centre and a variety of accommodations in the area checkout the web site.

www.buceobasetes.com/en/

Phil Rudin

A Return To Tiger Beach

with Steve Rosenberg

In January 2012, I made a return trip to Tiger Beach with Jim Abernethy's Scuba Adventures for another one of their incredible weeklong shark adventures to the northern Bahamas. It had just been too long since my last shark adventure on the MV Shearwater. As a bonus, Andy Sallmon, who is an outstanding professional underwater photographer from southern California, was on the boat. Between Jim and Andy you can't help get but pick up some useful tips on shooting sharks. During the trip, Captain Mike mounted a Go Pro Camera on a remote controlled boat speed boat and enticed a couple of tiger sharks to try their hand at boating. Fortunately, Mike recovered the GoPro and Andy got some incredible images of the event.

The week started off a bit rough and windy. Jim elected to visit two shallow reefs before heading out to Tiger Beach. After one day of bad weather, the winds eased and the seas calmed down, making the entries and exits a piece of cake and the surface intervals between dives very comfortable. We spent a day with amazing shark interactions at Hammertime reef and Ginormous reef. There were plenty of opportunities to set up unusual photographs at the end of swim-throughs and atop indentations in the coral reef with sharks continually making fly-bys and swim-overs. We took advantage of the opportunity to allow some of the Caribbean reef sharks to pose with splashes of colorful sponges and lionfish. Despite a persistent wind and somewhat spotty visibility we had awesome close-up encounters with Caribbean reef sharks, lemon sharks, a tiger shark and a friendly Goliath Grouper.

The MV Shearwater at anchor in the shallows at Tiger Beach, Northern Bahamas.

Later when we parked at Tiger Beach and after the wind had died down a bit, we were treated to more incredible photographic opportunities. The various sections of Tiger beach are only about 20 feet deep, but feature swarming lemon sharks, intermixed with visits from tigers measuring up to 18 feet in length. Its always an exhilarating experience to grab your camera at the swim step, duck your mask into the water and roll forward with 20 or 30 lemon sharks milling about the dive platform. The lemon sharks, measuring up to 10 feet in length, sport a toothy sinister smile and their sleek 'fighter jet' profiles make for awe-inspiring portraits. However, the tigers are the real "super

Volitan lionfish poses for a picture unaware of the potential danger from predatory Caribeean Reef sharks.
Subal Housing with D300 camera, Sea & Sea 250 Strobes Tokina 10-17, ISO 200, F/11, 1/250

models," measuring up to an incredible18 feet in length. The tiger sharks deserve, and require, your constant attention. On this trip we were underwater with as many as 8 tigers at a time.

As an underwater photographer I have had the good fortune to work on assignments shooting sharks all over the globe. Jim Abernethy runs a very professional "stick to the rules" operation that allows photographers and videographers one-of-a-kind encounters with a variety of large predators that are available nowhere else in the world. Passengers on his live-aboard boat, the Shearwater, are treated to Jim's hands on expertise in dealing with sharks and his awesome knowledge of photographing large predators. I can't wait to go again for another unique shark adventure, always looking for those one of a kind images.

A few basic photo tips.

The photo opportunities on one of Jim's shark trips are so plentiful that you don't have to rush and just take snap shots. The best advice that I can give you is to listen to Jim Abernethy. He is the kind of person who is genuinely excited about helping his passengers get extraordinary shots. That said, when you get underwater, take your time and try to visualize what a shot will look like. Anticipate the angle of your subject and what is going on in the negative space around your subject. Try to isolate the subject(s) and get them swimming toward the lens at an angle. This will emphasize that the shark is entering the picture.

Keep in mind that the scent from the bait will flow from the bait boxes down current. The tiger sharks will follow this scent and will normally approach the area from down current. When tiger sharks are present, it is important to face down current, keep a safe distance from the bait and

Portrait of a tiger shark at Shark Tooth Ridge. Subal Housing with D300 camera, Sea & Sea 250 Strobes, ISO 400, F/13, 1/160, Nikkor 12-24 Automatic focus

Jim Abernethy, bait box in one hand and camera in the other, plays matador with his supermodel tiger shark Emma.

Subal Housing with D300 camera, Sea & Sea 250 Strobes, F/13, T 10-17, ISO 320, 1/200 Automatic focus

constantly communicate with other divers, pointing out the location of the tigers. In the shallow sandy areas of 'Tiger Beach,' divers should also position themselves closely, in a straight line to form a barrier for the sharks. You should 'over-weight' yourself to make it easier to stay on the bottom. If the group of divers spreads out in a haphazard arrangement, that is when you lose track of the big sharks and the situation can get out of hand.

When you are diving reefs, the bait is normally placed in crates attached to floats. This will keep the bait off the bottom. On the deeper reefs you will usually be diving with Caribbean reef sharks, lemon sharks and nurse sharks. Here, divers will normally spread out more. After the bait boxes are placed on the reef, spend some time observing the behavior of the sharks and look for patterns, so you may be able to predict direction and locations where they will be swimming over the reef. Then look for possible interesting compositions, tying in colorful sponges or corals.

Try to get as close as possible to your subjects and work on getting upward angle to add drama and separation from the background. You will discover that the first part (getting close) isn't that difficult. Of course, you don't have the luxury of burying your face in the viewfinder. You really need to keep track of where the sharks are at all times, especially the tigers. Learn to anticipate when a picture is about to happen, pre-positioning your camera in front of you as the picture unfolds. Look into the viewfinder at the last moment, take the shot and then get back to looking around you to keep track of your models. The constant turning from side to side will cause chaffing from the collar of your wet-suit. When you get home from these trips, you may

A lemon shark at the surface near the dive platform, as we prepare for a night dive.
Subal Housing with D300 camera, Sea & Sea 250 Strobes, ISO 320, F-22, 1/200, 12-24 Nikkor lens with camera on manual focus at focal distance of less than a foot.

have some explaining to do to your significant other as to why you have so many 'hickies' on your neck.

It should be noted that Jim Abernethy has been running tiger shark trips in the northern Bahamas for well over ten years. During this entire period of time, there has never been an incident where a diver has been bitten by a tiger shark. Jim requires passengers to participate in these shark dives according to a specific safety rules and guidelines, and all divers must follow these guidelines as part of the group if they want to be in the water. As a final note, these large, magnificent predators are wild animals and there is always a degree of risk involved in such activities. For me, I look at my time in the water with these creatures as a blessing and an opportunity to share my images as a way of communicating their importance on this earth.

Steve Rosenberg
www.ReefID.org
Facebook page ReefID

Rubble beneath the waves

by Christopher Hamilton

Thirteen years after my first dive in the cold Atlantic Ocean off the coast of Nova Scotia I found my self about to plunge into her cold dark depths again. I've done more dives that I can count rugged up in a dry suit, but after many years of living in the tropics I have acclimatized myself to warm water and found myself a bit apprehensive. Did I do my Zipper up? With one last tug on it to make sure I took a depth breath, rolled backwards off the side of the lobster fishing boat I was on and hit the water with a bigger splash than I have made I quite some time.

The cold water hit my face and the memory of so many cold dives came flooding back. As I descended I fiddled awkwardly with my camera through thick cumbersome gloves and asked my self: why did I bother to do this all the time? Seconds later when I saw the twisted boiler of the S.S. Bohemian, a 1920s shipwreck, emerging for the dark green depths I remembered.

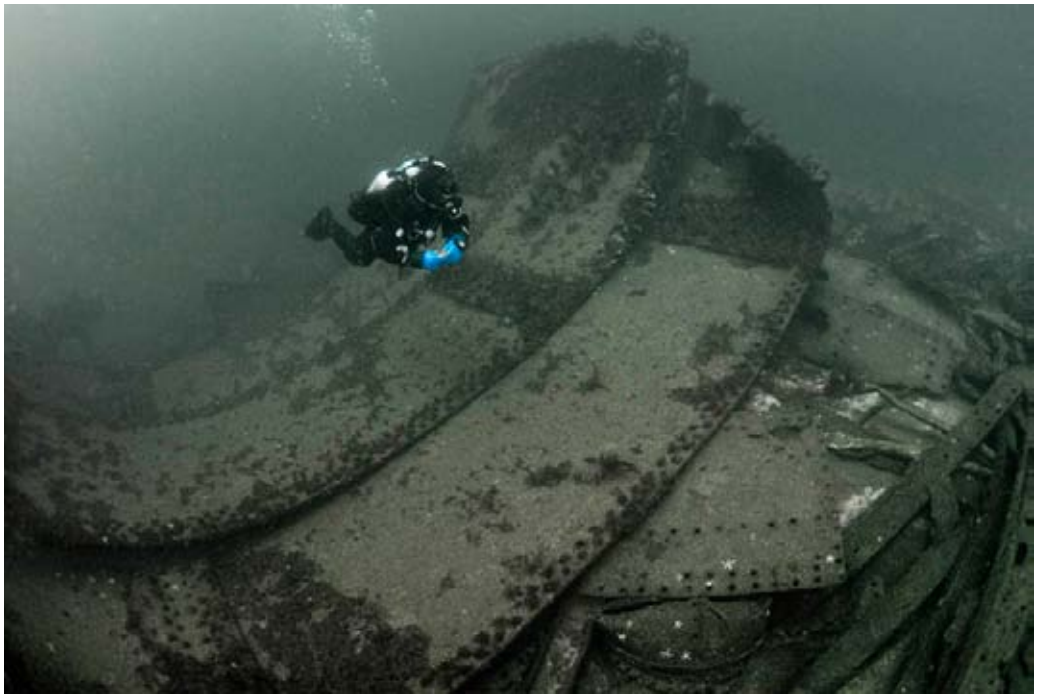
What a sight. In the days of steam this giant was a marvel of engineering, and a powerful instrument of commerce. Now she lies broken and half gone to rust and storms. This can be said of the scores of ships that were lost in or near Halifax harbor and all along the coast of Nova Scotia. Treacherous water, even with modern navigation equipment, but when a fog set in on a dark moonless night it is a wonder any of the old ships made it at all.

Many did not. In fact if you plot the position of all the known shipwrecks along Nova Scotia's coast on a blank piece of paper you are left with more or less a perfect map of her cost. The most intact wrecks lie in deeper water past sixty meters where the storm surge has had less affect on them. Such wrecks like the British Freedom, a tanker torpedoed by a German U-boat in 1944, are quite intact and have only been mildly affected by a recent hurricane and some salvage attempts. The relentless pounding of the sea has made short work of the majority of ships however. Most are little more than a debris field of twisted metal with the odd boiler or bollard.

Shipwrecks in Nova Scotia are protected under the "Special Places Protection Act" (1989)." Which, simply put, requires people to have special permits before collecting anything from a place where historical artifacts are found—i.e. a shipwreck. Like spear fishing or film making in the early days of SCUBA, little regard was given to the underwater environment, keen divers got lost in the moment by so much to dazzle their senses. It is certainly true that the majority of the historic maritime artifacts adorning rec rooms and dooryards in Nova Scotia were plundered in the early day

Five hundred and twelve feet of iron, and displacing over five thousand tons, The S.S. Bohemain of the Leyland Line as been reduced to rubble over the last ninety years. D200, subal, f5.6, 1/60, ISO 320.

NSshipwrecks: A scatter plot of shipwrecks around Nova Scotia



(Above & right) The S.S. Bohemain. Sunk only twenty years after construction on her way from Boston to Liverpool, UK. D200, subal, f5.6, 1/60, ISO 320

of SCUBA when we were cavalier and uninformed about the damage we were doing. Sadly however that attitude is still present. When I was learning to dive in the nineties it was just part of diving to bring up a brass door knob, some old buttons, or spend the whole summer with a crow bar and a sledge hammer prying a port hole from the hull of a ship that was not ready to give it up. Today we are left with ship wrecks that have been striped of their most interesting parts, and lie forgotten by most, battered by storms each winter, and defiled by divers each weekend all summer long. Of course it is unfair to say all diver are to blame, the majority are quite respectful. Unfortunately it only takes a few to spoil things.

For now however, there are still many ships wrecks that are still very worth braving the cold to go and see, and I encourage those who dive to get in and have a look while they can.

Photographing these wrecks presents many challenges. Firstly there is the act of swimming and shooting wrapped in 7mm of rubber, with 200 cubic feet of gas on your back and more hanging at your side. Add to this green water, heavy surge when you are above 100 feet, and almost no light when you are below—you have to be committed to the premise of underwater photography if you are to get past the frustration and onto getting some good footage. Depending on what you shoot, the first thing I do is get my ISO off 100 and take it up as high as I dare. With the d200 that is about 400. Large

Railing still intact on the British Freedom, almost 70 years later. Nikonos II, drugstore film, digitized with a Sony point and shoot and a slide duplication kit

Large bollards remain after the deck of The S.S. Bohemain has long since crumbled into scale. D200, Subal, 2 Ikelite ds125, f6.3, 1/60, ISO 400

dome ports are nice, they let in more light, but you can also open your aperture more before you start to lose the corners. But the biggest benefit is a stable hand and a lens as wide as you can muster. For the DX shooter, I have found (no surprise here) the Tokina 10-17 is a superb lens for the job. Get up close and use what little light you have to its best possible advantage. I like to shoot available light when possible to capture the vastness of a boiler, or the twisted deck of an old steamer. When you add some artificial light, however, it is amazing how much color presents itself. When shooting with strobes I find I only need a breath of well-placed flash to spread a small amount of even light on my subject. As I swim along I find my excitement building as my eyes tune into what I am actually looking at.

Christopher Hamilton

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An Eye for Detail

by Mark Webster

A familiar conversation on perhaps a Red Sea live aboard amongst non photographers (some people call these 'normal' divers….) is that they have dived a particular site before and there is nothing new to see there. This of course does not only apply to the Red Sea and some photographers might even react this way if they have visited a site several times before even if it is brimming with life. It could be that you have reached the stage where you have a collection of pictures of the most common and perhaps some of the more unusual species and are wondering what to do next. At this point some may lose interest, some may pursue larger blue water subjects, remote and frigid locations or perhaps deep wrecks all of which might increase the technical or physical challenge and be enough to maintain the attraction of photography.

Aside from the fact that you can always improve on the way you photograph a common species, if your attitude has become jaded in this way you might begin to try and visualise your potential subjects with different approach. This is the point where you may move away from images which simply record or identify your subject towards the artistic development of your images. If you are repeatedly diving in similar locations, one of the best ways to develop this skill is to begin to consider the detail features of your subjects and seek different ways of presenting them.

Sand diver - some subjects like this sand diver only offer a portrait shot by virtue of their behaviour. In this case the dark volcanic sand provides good contrast with the subject. Nikon D200, Subal ND2 housing, 105mm micro, Inon Quad flash, ISO 100 f16 1/100.

Frog fish portrait - a classic profile portrait of a frog fish with a striking red colour. By composing the fish against open water it is possible to ensure a black background with a fast shutter speed and small aperturefor maximum contrast. Nikon D200, Subal ND2 housing, 105mm micro, Inon Quad flash, ISO 100 f22 1/250.

Portraits

Most of us start by photographing the fish that we see during a dive and the initial desire is to bring back a picture that we can easily identify the species from. These identification shots are typically side on views which show the whole fish and perhaps some of the surrounding habitat. What's wrong with that I hear you cry?! Well, absolutely nothing and this style of shot will produce some excellent images, but you will soon find yourself struggling to find different subjects and very often the fish in the picture lacks character and does not communicate with the viewer. The secret of a good fish picture is to create a feeling that the subject is looking at or communicating with the viewer and one of the best ways to achieve this is portrait photography. Just as with land photography this term mostly equates with a head and shoulders shot which is normally taken in the 'portrait' or vertical format, but works equally well in the horizontal or landscape format dependant on the shape of your subject.

The way that you compose and frame a shot like this can make all the difference to success and failure. The classic method is to create a diagonal line in the composition and place the eye towards the centre third of the picture. An upward view can also be very effective and gives the viewer the feeling of being looked down on by the fish. You can vary the background around the subject from jet black, which may contrast well with the colour of the fish, to a more natural blue or green water colour by balancing the power of your flash with the available natural light. If the fish is in the wrong position for your desired composition simply play with the orientation of your camera until it looks right - however, you must also be aware of your flash position and adjust it to suit the composition. If you have TTL then it normally works well in these compositions as the subject will fill the centre of the frame, if not shooting with manual flash exposure and a swift review will quickly produce the correct settings. However you compose the shot the most important feature of a good portrait is the eye of the fish which must be in perfect focus and looking towards the viewer. Other elements can be a little out of focus and still look OK, but the shot will fail if the eye is soft.

Now that snoots are back in vogue there are a number of variants available commercially to replace all the plumbing parts and plastic bowls we used to use. The new innovation of fibre optic snoots also offers a chance to direct the light source more accurately and produce a different mood and feel to a portrait. You will need to find some patient subjects for this technique however and the camouflage and stealth hunters are a good place to start. Aiming the fibre optic snoots is difficult and I find that attaching a small Pelican torch to the end of the snoot helps, but some

Bearded scorpion fish - you can vary your portrait presentation by simply using a different lighting technique. In this case a fibre snoot has been used to project a narrow beam of light onto the subject leaving the surrounding negative space black. Nikon D300, Subal ND2 housing, 10-17mm FE zoom, 2X teleconverter, Inon Z240 flash gun and fibre snoot, ISO 200 f11 1/125.

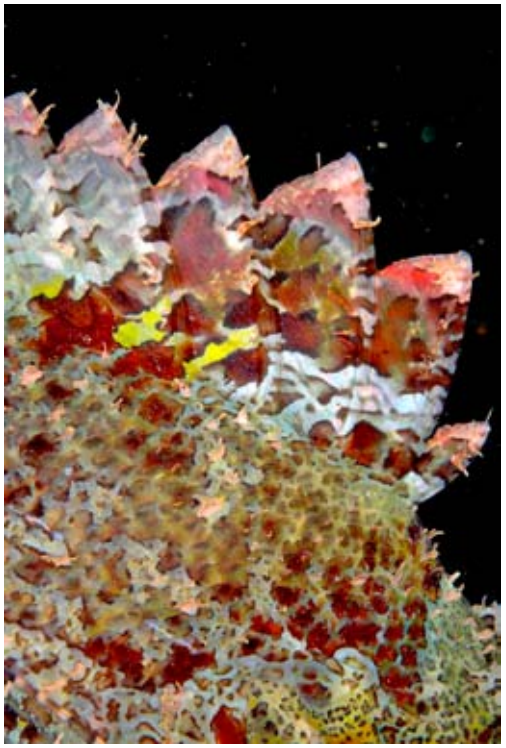
Tompot blenny - this image demonstrates how you can subtly vary the portrait presentation of your subject by using a different lens combination. Using a fish eye zoom with a teleconverter will produce a forced perspective image with the impression that the fish is moving out of the image towards the viewer. Nikon D300, Subal ND2 housing, 10-17mm FE zoom, 2X teleconverter, Inon Z240 flash guns, ISO 200 f16 1/125.

species are less tolerant of this light source approaching them.

Most portraits can be taken with a macro lens dependant on the size of your subject. A short range zoom like the Sigma 17-70mm will also works well at the longer focal length. Some species will allow a slow close approach, whilst others will not endure it and only trial and error will reveal those that will.

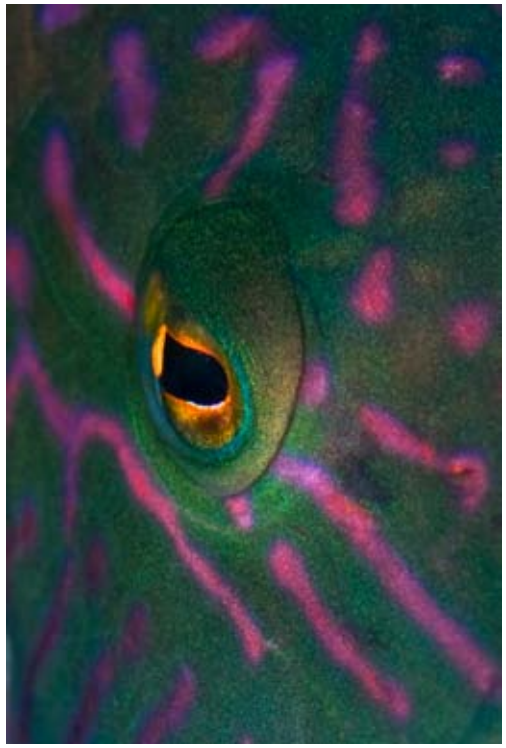
Texture and Patterns in Fish

An alternative to the fish portrait with a macro lens is to move in closer still to capture details or particular features of your subject. Many fish, particularly in the tropics, have dazzling colours, textures and patterns which look wonderful and sometimes surreal in close up. To capture this sort of image you have to get really close to your subject and to begin with it is perhaps easiest to target sessile subjects like scorpion fish or crocodile fish, who are convinced of their own camouflage. Diving at night is also a good way of making a close approach to fish whilst they are sleeping or you can position yourself close to a cleaning station and wait for clients to arrive and hold still for a wash and brush up. As with most things in nature photography, patience is the key here and you may need to wait a little while for your subject to accept you and gradually get closer. Once again, think about the composition as you view the subject, and move or reorient your camera to gain the best effect and check the result on the preview screen. By concentrating on the finer detail of your subjects you will begin to see commonplace subjects in an entirely new way.



Scorpion fish dorsal fin - when you have a docile subject like this scorpion fish try and work all the angles and capture all the abstract opportunities and lighting options. Nikon D200, Subal ND2 housing, 105mm micro, Inon Quad flash, ISO 100 f16 1/125

Dwarf lion fish pectoral fin - this lion fish fin looks to me very like a ladies fan from the Victorian drawing room era. Nikon D100, L&M Titan housing, 105mm micro, Inon Quad flash, ISO 200 f16 1/60



Rainbow wrasse - the subtle colours and patterns around the eye of some reef fish will produce a powerful and punchy composition when photographed with a macro lens. Nikon D200, Subal ND2 housing, 105mm micro, Inon Quad flash, ISO 100 f11 1/125.

Eyes Only

The complex patterns and colours on many fish often includes the eye with stripes and swirls radiating from it making a very striking feature. So concentrating on just the eye opens up another range of possibilities and also leads you to think beyond only fish. You can extend your search to crustaceans (crabs, lobsters, shrimps), shellfish (clams, scallops, triton and helmet shells) and cephalopods (cuttlefish, octopus and squid) which increases your options on every dive. Once again sessile species are the way to

start and then begin to hunt for other patient and approachable subjects and for opportunities at night. Many crustaceans only emerge at night and you will mostly see squid, and often octopus, during night dives particularly when they are attracted to feed by lights from a boat on the surface. Many fish sleep in small cracks and fissures in the reef at night so a longer focal length macro lens with your DSLR is often the best choice for filling the frame. Compact cameras are at an advantage here being both small and having good zoom range as standard. Cuttlefish are often found during the day partly buried in the sand and will allow a slow close approach, perhaps convinced you cannot see them. The same applies to many species of flatfish and rays so there is almost an endless choice no matter where you choose to dive.

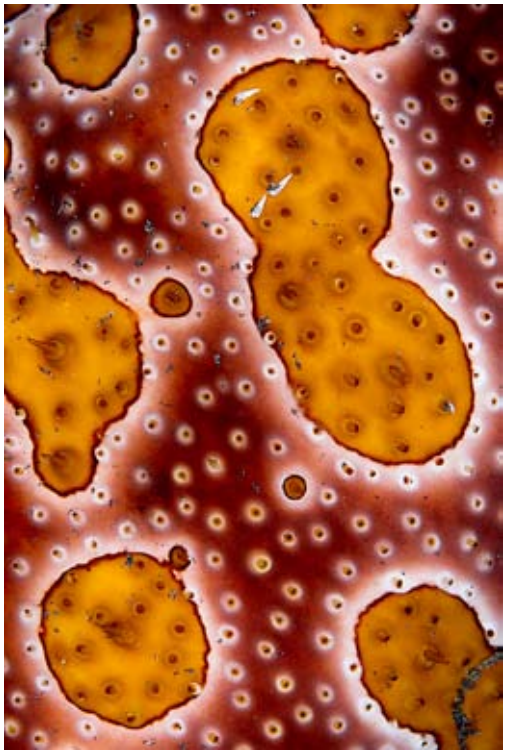
If you have a snoot then eyes offer another opportunity to produce something a little different. Keri Wilk's well published shot of a star gazer's eyes lit by dual snoots should provide inspiration, although there are not many subjects that will stay patiently in place whilst you work close to them. Some crocodile fish or angler fish (or Monk fish in the UK) may allow you to set up and work very close and most frog fish will ignore you. So you will need some patience to find a suitable subject and set up a shot like this.

Abstracts

Many would argue that all photography is art although with underwater photography we may tend to consider the technical challenges primarily. However, once you get your eye attuned to the colours and patterns in fish, cephalopods and crustaceans you will begin to realise that almost every creature has graphic potential and does not need to be photographed in its entirety. Many corals, sponges and invertebrates have stunning colours and patterns which are not always apparent with a passing glance and only become obvious when you concentrate your gaze through the lens and perhaps apply a bit of lateral thinking. Begin by looking for strong colour contrasts and then examine the detail for perhaps the perfect shape of a coral polyp or a strong compositional form. Try not to see the subject as an animal or plant but more as a combination of colours and shapes which will attract the viewer's eye.

In the tropics subjects like gorgonian fan corals, anemones, sea urchins or giant clam mantles often produce striking patterns. Where the position of your subject allows you can try to vary your lighting techniques to produce different effects. Small apertures and fast shutter speeds will produce a black background which will contrast well with pale colours or use a slower shutter speed and wider aperture to produce a blue or green water background which will contrast better with darker colours. You will most often need to photograph these subjects at life size reproduction (1:1) or perhaps with greater magnification of 2:1 (twice life size) or 3:1 (three times life size) to get the desired effect. This can be achieved with

Crocodile fish - these fish have the most fascinating eyes with the camouflage system passing across the eye ball to ensure they remain hidden from prey. It also makes them one of the most approachable species for eye photography. Nikon D300, Subal ND2 housing, 105mm micro, Inon Quad flash, ISO 100 f16 1/125



Sea cucumber detail - many sea cucumbers in the tropics have fascinating and complex patterns on their surface. A gentle waft with your hand will remove most of the sand to reveal the pattern. Nikon D100, L&M Titan housing, 105mm micro, Inon Quad flash, ISO 200 f16 1/60.

the addition of wet or dry close up dioptres, tele-converters or a combination of both. However, the greater the magnification you use the narrower the depth of field will become and getting your photographs into sharp focus becomes a real challenge. Starting with 'flat' subjects is easiest and you must concentrate on keeping your lens perpendicular to the subject to maximise the depth of field.

The abstract patterns and colours of the marine macro world are often stunning and frequently produce greater interest from non divers who may consider these images more as graphic fine art rather than marine life. This sort of photography is both challenging and rewarding and will reveal a whole new range of subjects and effects as you begin to explore the detail of the reef.

So there is always something new to try, even if your efforts do not produce success at first. Don't give up, get serious, fire the imagination and rekindle your enthusiasm!

Mark Webster
www.photec.co.uk

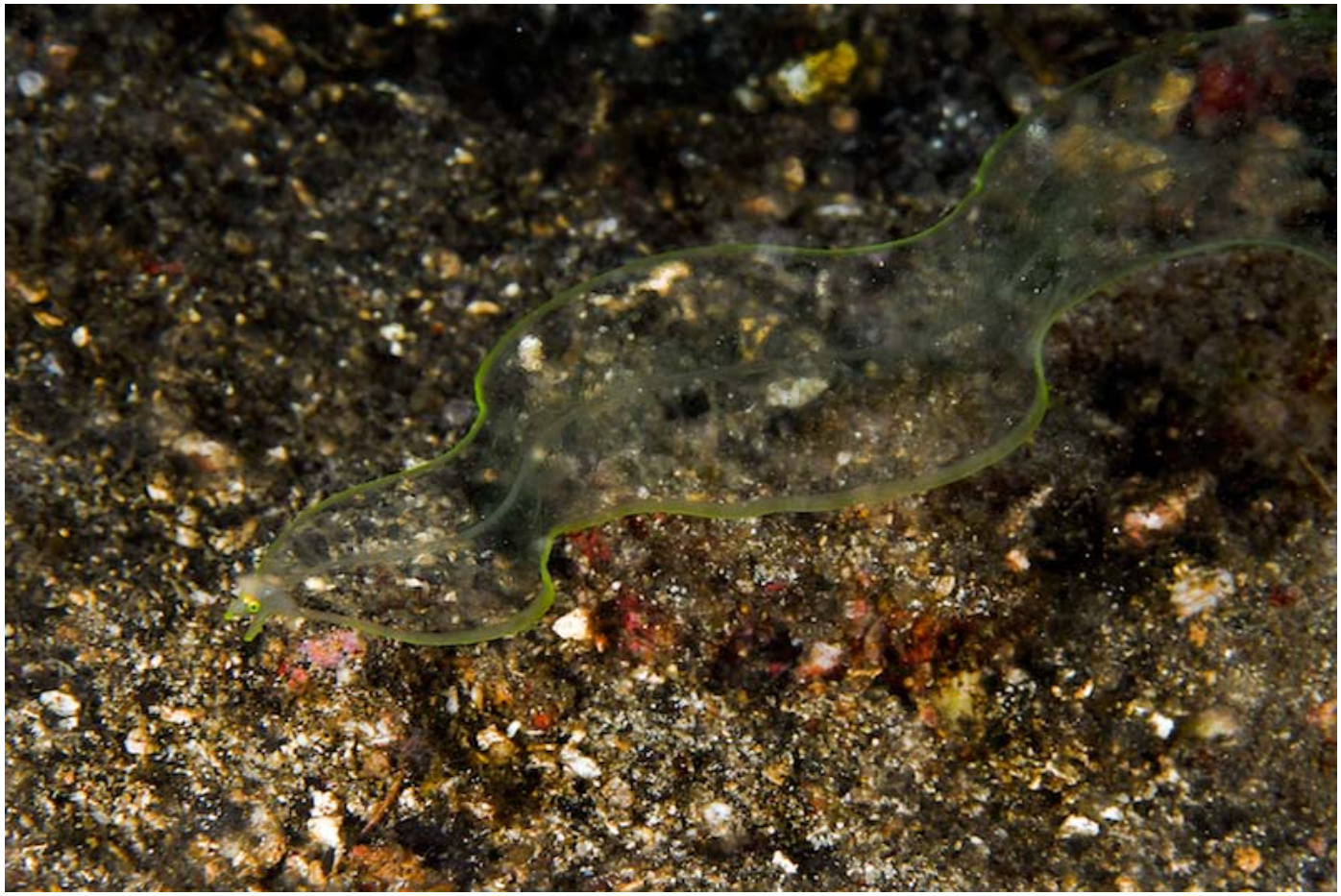
Alien

By Selen Yavuzdogan
Photos by Tunc Yavuzdogan

Underwater in Lembeh is magical. Its murky waters are home to around 2000 species, many of which are too small for the untrained eye to spot during a dive. It's normal to find something on or under everything in Lembeh. It's one of those rare places where you are likely to see a shrimp on a nudybranch, an orangutan crab out in the open sand, flamboyant cuttlefish hatching from eggs miraculously.

It was December, 2009 when I first went to Lembeh. I've always been drawn to the tiny, colorful creatures of the seas and Lembeh was generously displaying these hidden treasures if you could manage to see them. Tunc was also ecstatic forming his own version of Macrolife. We had the best dive guide we've ever seen with us who could find tiny little creatures everywhere. I was ready for miracles and it happened.

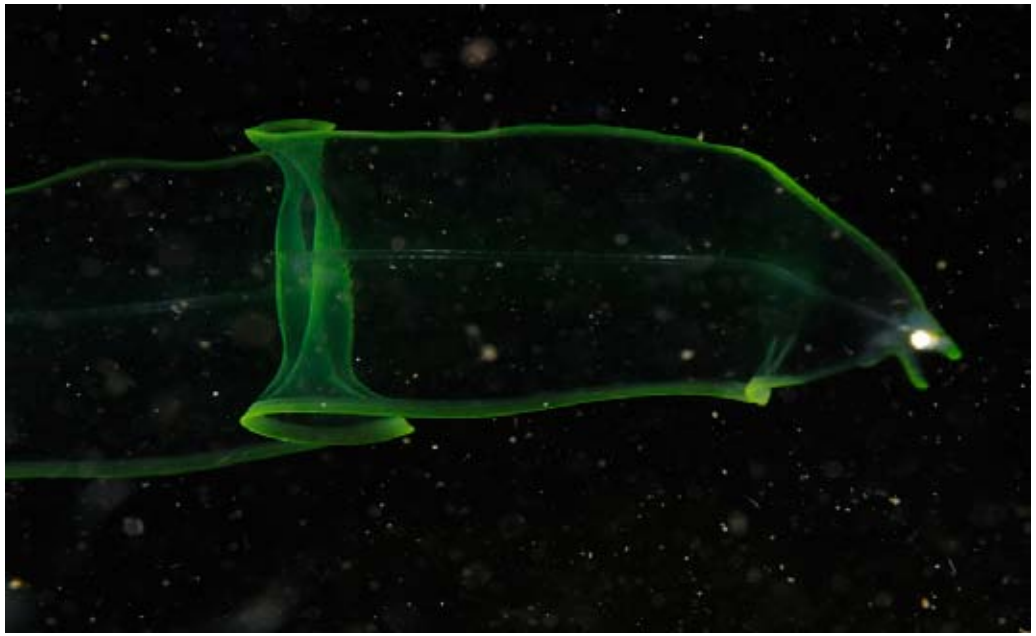
We had just started our dive in Jahir I, and it was quite an ordinary dive until our guide showed us an alien-like creature moving frantically around. It was transparent, around 30cm in length and looked like an eel. It was so transparent that, it was very hard to focus and capture a good shot of it. Its crazy and clumsy movements hinted that it was a juvenile, but the size was big enough to be a grown up eel of some kind. I was so amazed and hypnotized by this hyperactive, transparent odd creature that, it took me couple of minutes to capture it on camera before we lost sight of it.



Nexus Nikon D200, 60mm macro, 1/250th @ F22. ISO 100

Tunc took some pictures, I took a short video and we went on our dive. We had no idea that we had such a rare experience. If we did, we would definitely spend the whole dive trying to capture its beauty, getting more detailed shots of it.

After the dive we rushed to check the books and internet to learn what it was. It looked like an eel, it was definitely a juvenile eel, but it was too big for a larva. It didn't really look like anything we could find in the books or online resources. We started to get more more intrigued by the "thing" we had seen and we were desperate to find out what it was. Tunc posted the picture on wetpixel.com and asked for an expert opinion. Marine biologists had different ideas. One of them said he needed to count the muscle segments to be able identify. Another one said, the problem with Lembeh was that there were too many species, some of which



are unidentified. It was only then we learnt that this creature had been spotted only twice and our encounter was the third. We sure still regret the rest of that dive that we hadn't spent with it.

There was a lot of interest in the creature's picture. It was published in Alert Diver and Asian Diver. National Geographic editors had chosen the alien picture to print in the "Your Shots" section on December 2010 issue. It also attracted the attention of marine biologists. Dr.Miller contacted Tunc to support his study of a new eel species, which he thinks was the same as the one we had seen. We sent the photos and videos we had and he will use these for his scientific work on this odd eel.

Its translucent body and tiny head was so fragile, beautiful and strange at the same time that it raised different feelings in everyone. Horror, admiration, curiosity and skepticism are to name a few. One common ground was that it was extraordinary and looked like it lost its way out from a James Cameron movie. Now and then whenever I dive in Lembeh, there is a part of me that hopes to meet this lovely alien again.

Selen Yavuzdogan
& Tunc Yavuzdogan
www.underwaterphotovideo.com

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

Guidelines for contributors

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

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

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

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

How to submit articles

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

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

Even a failure may be good for your shot. A few years ago I visited Gulen, Norway to do some "good visibility" diving (compared to the muddy Baltic Sea). In cold Atlantic water one rather use a dry suit with dry gloves which means that the feel of camera and strobe controls is not the best.

Due to the low amount of light in Scandinavian waters I carry a 21 watt HID dive light. Despite it is a handy dive light I use it as a focus light, too, even it is a bit tricky. The lamp head has so called good man's handle so it was handy to keep in my left hand. The camera housing leans on top of my left arm so that I can point the subject with the light, press the trigger half way to focus and then turn the light away before taking the actual picture.

This particular dive we made on a dive site called Stingray City. Our dive master advertised that there most probable would be an opportunity to photograph some stingrays even the density of them is not as high as in the more famous site with the same name in Grand Cayman. I had not seen any stingrays in tempered water so my expectations were quite high. Some of our group succeeded to see and photograph some stingrays but me and my buddy we did not see any at all.

However, having a wide angle lens and dome I start to look some wide angle subjects. After a while and some shots I found a sea star in nice position and decided to photograph it. I again pointed the light to the subject and pressed the trigger to focus. Due to the bulky gloves I pressed the trigger just a little bit too much so the light were still pointing to the star. Just this time - for a reason unknown to me - my strobes did not fire. I was disappointed but decided to look the result - a habit. There was an image lighted only using the HID light. However even on the small screen it looked quite correctly exposed. The HID light has functioned like a snoot leaving most of the picture black.

I have tried later to take some close ups using only my dive light as the light source but I have not got anything as nice as this one.

Canon EOS 50D in UK-Germany housing, Tokina 10-17@14mm with 8" dome port. No flash but 21W HID light . f/8, 1/45 sec, ISO200

Mikko Voipio

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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