

Discover UNDERWATER Photography



SLR-DC Housings

The Ikelite SLR-DC housing takes full advantage of the digital SLR camera's innovative features. The housing is injection molded of clear, lightweight polycarbonate for strength, visual access to the camera, LCD screens and camera controls. The housing provides controls for most camera functions. Most Ikelite SLR-DC housings include conversion circuitry that provide TTL compatibility with the latest Ikelite DS Substrobes. Many housings also include a Flash Compensation Module which provides over and under-exposure compensation in the TTL mode and easily allow you to switch to Manual Exposure Mode which provides eight power settings. All exposure compensation is done on the back of the housing. There is no need to access complicated camera menus.

- Canon**
 EOS 5D
 EOS 5D MKII
 EOS 20D
 EOS 30D
 EOS 40D, EOS 50D
 EOS 350D, Rebel XT
 EOS 400D, Rebel XTi
 EOS 450D, Rebel XSi
 EOS 500D, Rebel T1i
 EOS 1000D Rebel XS

- Nikon**
 D40, D40x
 D60
 D70, D70s
 D80
 D90
 D200
 D300
 D700
 D5000

- Olympus**
 E-3
 E-30
 E-330
 E-400, E-410, E-420
 E-510, E-520
 E-620

- Sony**
 A-200
 A-300, A-350
 A-700

Substrobe DS160

From its first introduction in 2001, the Substrobe DS125 became the overwhelming choice of professionals and discerning photographers the world-over. Now the best is even better. Introducing the new and improved Substrobe DS160.

The Substrobe DS160 is compatible with all Ikelite TTL systems and current digital cameras, as well as all older TTL film cameras including the Nikonos system. A variety of sync cords, sensors, and TTL adapters are available to connect to almost any camera system currently on the market. Incorporates a new super-bright built-in 5-watt LED modeling light, perfect for focusing or night diving. Automatically turns off and on when the strobe fires.

Compact Digital Housings for

- Canon • Fuji • Nikon
 Olympus • Sony

Ikelite offers housings for more than fifty different digital still camera models to meet the diverse demands of the underwater photographic community. Ikelite's Compact and ULTRACompact Digital Still Housings are molded of clear polycarbonate. Dive while knowing your system is safe and have complete visual access to the camera, LCD, monitor and control functions. Most housings are rated to 60m (200').



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Underwater Photography
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Publisher/Editor Peter Rowlands
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peter@uwpmag.com

Editorial

Canon UwDSLR?

As a long time advocate of online publishing I don't buy that many printed magazines but whilst away for a weekend at a location without an internet connection I drifted down to the local book shop and bought a copy of Digital SLR Photography magazine to help soothe my twitching mouse finger.

It was the August issue and it contained a double page spread celebrating Canon's 50 years of producing SLR cameras. Now I'm not a Canon user but for some reason I carried on reading about their history of producing ground breaking products culminating in an interview with Lee Bonniface, Canon's top man in the UK. When asked "What's next for DSLRs in general?" I have précis'd his reply which was as follows:

"This is a difficult question to answer; I'd like to think we will see even more intuitive interfaces, bla bla bla, GPS, bla bla bla, WiFi etc etc and then (WAIT FOR IT) , what the hell, even an underwater DSLR that doesn't need a housing - with interchangeable lenses. Then there was more bla bla bla etc etc etc but by

this time my mind was racing ahead. An underwater DSLR eh? Hadn't I heard that somewhere before in the old film days? That's right. Nikon produced the Nikonos RS to a great fanfare and, in doing so, created what for a long time had been the desired myth - an SLR camera that didn't need a housing. The problem was that in producing the myth they made most people realise that, in fact and all along, it wasn't really the perfect product we thought it would be.

I jested at the time that RS stood for 'Rich Sods' - a camera, lens and strobe were the price of a small car; build in a back up camera body, extra lens and a spare strobe and it was soon the deposit on a small house.

The problem also was that a land camera in a housing was still much more versatile in terms of lens choice, more up to date in terms of technology and, should a flood occur, much less (comparatively!) expensive and simpler to repair/replace.

History has shown that, far from being the death knell of the housed land camera, the Nikonos RS pointed out all the advantages of the combination and resulted in a significant lurch towards housed land cameras.

I suspect that if the accountants at Nikon could have a quiet word with their counterparts at Canon they could save them an awful lot of money.

Happy 50th birthday UwP

Time, as they say, flies and the older you get the faster it flies and this is certainly true for UwP.

The past 8 years seem to have flown by, punctuated every 2 months with a new issue of the magazine. Each one virtually unplanned - relying totally on voluntary contributors to support the cause - the consistency of quality never ceases to amaze me for, as I always say, after each new issue is made available, the contributions cupboard is bare and awaits arrivals to fill the next issue.

All of UwP's contributors have been a pleasure to deal with and I hope that their output has been, for you the reader, a pleasure to see and read. It would be a wasted opportunity for me if I did not encourage to make a donation to them at

www.uwpmag.com/donate.html

As I always say in my e mail to thank contributors after each issue becomes available "UwP is nothing without its contributors".

My thanks go to them all, for their generous gesture of time, talent and knowledge helps to keep UwP free for all you readers.

That donation link again is www.uwpmag.com/donate.html

Steve Jobs and Apple

I have been an Apple Mac user since 1897, sorry, 1987, and have stuck with them through thick and thin.

I used the desktop publishing capability of the 1987 Macintosh (400k disk drive!) to produce the first printed magazine 'Underwater Photography' which went for 12 bi-monthly issues before being expanded into SportDiver magazine in the UK.

Today's UwP is still produced on a Mac but using InDesign software to layout the pages and it's a breeze to work with to produce downloadable pdf files but I feel that we are on the edge of another revolution which started with desktop publishing followed by the iPod, iPod Touch and the iPhone.

Rumours abound that Apple is about to announce an iPad (it has the ring of Moses about it to me) which could well sort out the 'e-publishing' world. Sony have tried electronic book readers and so too have Amazon but I suspect it will take the genius of Steve Jobs and Apple to produce what is really needed/desired.

I, for one, am watching this space.

Peter Rowlands
peter@uwpmag.com

www.uwpmag.com

News, Travel & Events

North Sea Film Festival

November 6-8th 2009



The third edition of the North Sea Film Festival is definitely on! The one and only Dutch underwater film festival will take place on November 6, 7 & 8 at Studio/K in Amsterdam.

We have changed the festival location and moved to Amsterdam. We will still be screening high quality films on surprising topics, will organise workshops and an information market. This year we also focus on other artforms and will set up exhibitions as well as a video installation.

Q&A sessions will take place after screening of each movie so visitors and filmmakers can easily get in touch with each other. Studio/K's bar with its great atmosphere will provide drinks and food to make the festival complete.



We invite all underwater filmmakers to participate, there are no costs involved! You'll find all information and details on our website.

www.northseafilmfestival.com

www.uwpmag.com

DPG monthly photo competition

We are proud to announce the guidelines for the monthly Underwater Photography Contest Series. The contests are free to enter and each month we will be giving away a valuable prize - because you deserve it...and that's how we roll!

Here's how it works...

Each month we will be announcing a contest theme. You can easily enter by uploading up to three images into your DPG gallery. The editorial staff of DivePhotoGuide will select a first, second and third place winner. While only first place winners will receive the monthly prize, all three monthly winners will receive an award certificate and will be entered into an annual contest for a chance at the grand prize, which will be awarded based on votes from the DivePhotoGuide community. Monthly prizes will include underwater photo equipment, scuba diving equipment, apparel, and of course dive trips!

At all times we will post six months' worth of themes or subjects. So the next time you go underwater, you can challenge yourself to shoot a specific personal assignment - let's see what you got!

You can add images to one of your existing galleries on DPG or



create a new gallery just for your contest entries.

In either case your images will be entered into the monthly contest as long as it includes a specific tag that we will provide for each month's contest theme. The tag is easy to add to the image while uploading. Please be sure to copy the tag exactly as instructed for each contest.

The DPG community is comprised of the best underwater photographers from all corners of the world. The level of talent never ceases to impress us. The DPG contest series is intended to promote friendly competition, to push your skills, and to give you specific themes or subjects to focus on for your next dive trip. The deadline for each month is always the last day of the month.

www.divephotoguide.com

FUJIFILM SCUBASNAP09

In association with Looe Divers, Fujifilm are proud to announce a brand new Underwater Photographic Competition to be held over the weekend of the 12th & 13th of September 2009 - this is open to any standard of diver the only rule is that you use a COMPACT digital camera and housing. Shore diving only from two great sights in Looe, Cornwall - fabulous surroundings for a great weekend of diving, fun and education.

Seminars and Advice Great Prizes

Experts from the like of Mat Trim LBIPP from Fujifilm, Maria Munn from Ocean Visions, Charles Hood from Dive Magazine and BSQUP will be on hand to give advice. There will be seminars and exhibitions to help you improve your technique plus a barbeque on the Saturday night - great fun for all. Any standard of diver can join in the fun - even snorkelers can enter! The competition is a shore dive from two locations in Looe, Cornwall. The dive sights have a variety of habitats and even boast a wreck. Come and have a go - who knows you may even win. The winning entry will be also published in the Dive magazine.

There will be various categories each with great prizes and the opportunity to improve your photography with critiques, there will be loan cameras for those who forget their gear and loads of fun.

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LOOE
DIVERS

Marine Biology One Day Course

Saturday, 12 September, 2009,
Action Underwater Studios,
Essex

Jamie Watts' day of marine life presentations and workshops is intended as an introduction to marine life worldwide. The objective is to inform, to build an understanding of the living marine environment and to inspire an ongoing fascination with, and understanding of, the world we dive in.

The day aims to provide a brief overview of every group of animal and plant life, then put them in the context of the global 'big picture'. It is based around five presentations and two group sessions. It is a one day course, but be warned - it is a long day! The scope of what we cover is vast - a lot to squeeze into one day, and interest and enthusiasm often take us into the evening. For this reason we plan to keep timings under control during the day, then for those who wish to stay and discuss things further, we will retire to a local eatery and talk marine life as late as we like.



Jamie is a marine ecologist and fisheries biologist, and an old friend to Ocean Optics. He has a particular interest in high-productivity zones and the scope and scale of marine food webs. Jamie splits his time between fisheries research, consultancy and guiding trips to remote high-productivity regions, most recently polar regions. He has researched just about everything that lives under the sea, from coral reefs to copepods to leopard seals to king crabs to colossal squid, and in a former life worked on liveaboard and land-based dive boats all over the world.

After two years on the Antarctic island of South Georgia and then two seasons in the Antarctic Peninsula area, Jamie has just returned from a second season in the Arctic, acting as a naturalist, lecturer and guide.

www.oceanoptics.co.uk

Manatee Lovers



Manateelovers Association was established in 2009 by Averyl Chow, graphic artist and a passionate about manatees. The association was created in order to let the public aware of this gentle and harmless mammal – the manatee. Our goal is to inform and educate the public to protect our environment, thus, create a cleaner marine life for the manatees so as the other living species in the ocean. Manateelovers Association is a nonprofit organization. Funds from our donation program go to public awareness and educational campaigns, manatee research, and voices to ensure better protection for manatees and their environment.

www.manateelovers.com

www.uwpmag.com



DivePhotoGuide & Wetpixel 5 Year Anniversary Underwater Photo & Video Competition

This year DivePhotoGuide and Wetpixel celebrate the 5th anniversary of a unique series of international underwater photo and video competitions. The Our World Underwater and DEEP Indonesia competition series has become one of the most prestigious and well participated. Each year thousands of entries are received from all corners of the globe - the competition boasts a combined prize pool of over \$80,000. Judging the competition are world photographers and magazine editors from the US, Europe and Asia. New for this year will be a separate category for professional photographers to compete for both editorial and advertising work.

The competition details will be posted online on September 15th.

www.underwatercompetition.com



MSY SEAHORSE.COM

info@indocruiises.com

Raja Ampat | Triton Bay | Banda Sea | Komodo

2010 Raja Ampat Entrance Tag Design Contest



Wetpixel.com is proud to again host the annual Raja Ampat marine park tag design contest. If you have the perfect photo that captures the excitement and beauty of scuba diving in Raja Ampat, Indonesia, enter this contest for a chance to have your image printed on the 4,000 park tags that will be attached to BCDs of visiting divers.

The grand prize winner will have his/her design printed on the 2010 park tag and will receive an all-inclusive 7-day dive trip to Raja Ampat!

The 2010 Raja Ampat Entrance Tag Design Contest is sponsored by Conservation International and The Nature Conservancy. The deadline for submission was midnight (PST) August 28, 2009, but public voting will commence on August 30 and end on September 25, 2009.

www.wetpixel.com/raja

Deadline 6th September!

Due to the phenomenal success in 2007 the Sharks in Focus photography competition is back! This year's competition has five new categories including a video shark showreel! As always there is huge variety of fantastic dive prizes to be won, so to be in with a chance enter your best photos and videos now!

www.sharktrust.org/photo



Fujifilm Scubasnap 12/13th September 2009

Fujifilm UK Ltd. is pleased to announce their first ever underwater photo festival; ScubaSnap Weekend 2009.

The festival will take place in Looe, Cornwall, England on the 12th and 13th September in the wonderful surroundings of the Cornish coast and countryside.

In association with local dive operators Looe Divers, the weekend will include shore diving, photographic tuition and seminars from industry experts such as Mat

Trim of Fujifilm and Maria Munn of Ocean Visions, photo competitions, with some fabulous prizes to be won, and a dinner dive and BBQ in the evening.

ScubaSnap Weekend 2009 is open to divers of all levels. The only rule is that all photos taken and entered in the competitions must be taken on a compact camera. As well as photography education, goers will have the opportunity to critique their images with industry experts over the course of the two days.

www.looedivers.com
www.fujifilm.co.uk

They come in **breath-catching colours**; in **shifting shapes**; in **astounding disguises**; **tinchy tiny** or really **rather grand...** and always there is more to **dive** and to **enchant**



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www.ECO-DIVERS.com



Visions in the Sea

7&8th November 2009

**The City Inn, Aquatics Centre, The Palace
Manchester, England**

Visions in the Sea is a festival of underwater photography being held in Manchester in November. There is a fantastic line-up of presentations, in-water tuition, a competition, exhibition and gala dinner. The whole event is in aid of the Shark Trust. This exciting weekend is being hosted by Frogfish Photography and Ocean Optics.

There will be presentation by internationally renowned underwater photographers on both days with the guest speakers including: Cathy Church, Paul "Duxy" Duxfield, Martin Edge, Charlie Hood, Maria Munn, Alex Mustard, Jukka Nurminen, Tom Peschak, Peter Scoones and Steve Warren.

On Sunday afternoon delegates will have the opportunity to get some in-water tuition in the Manchester Aquatics Centre from some of these experts. This 5m deep pool will be transformed into an underwater world with reef, wreck, marine life of all sorts and model divers for the participants to practice their newly learnt photographic skills.

The festival is being sponsored by Cameras Underwater, Cayman Islands Department of Tourism, Dive Quest and Emperor Divers. Their support has enabled Visions in the Sea to offer all divers and underwater photographers the chance to improve their underwater photography, attend an

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event that will raise money for an important charity, raise awareness of the underwater environment, participate in educational presentations and attend a wonderful visual feast.

On Friday 6th November the Shark Trust (along with the Frogfish team and Ocean Optics) will be visiting a school and inviting other school children in the area to join in on an education day. This will give local children the opportunity to learn more about sharks and their habitat and for them to take part in art projects, talks and workshops throughout the day.

Saturday evening is time for everyone to let their hair down at the Visions Gala Dinner in aid of the Shark Trust. This will coincide with the 5th anniversary of Orca Divers who have organized an auction of prints from some of the world's best underwater photographers, followed by an after dinner speaker and live music.

Visions in the Sea will host a free exhibition open to the public with stands by Ocean Optics, Frogfish Photography, BSOP, NUPG, Shark Trust, our sponsors and guest speakers. The public will be able to view the finalists from the Visions in the Sea International Underwater Photography Competition. The total value of prizes exceeding £9000! The competition will be judged by our guest speakers over the festival weekend. Best in Show will win a Worldwide Dive and Sail live-aboard trip. Other classes include Suunto British Open and Mares Young Photographer of the Year. Additional prizes have been generously offered by: Apeks, Beaver, Blandford Sub-Aqua, Inon, Lumb Brothers, O'Neill, Sea&Sea, Sport Diver and Typhoon.

www.visionsinthesea.com

Lankayan The Borneo Photoquest

**23 January - 7 February 2010
with Martin and Sylvia Edge**

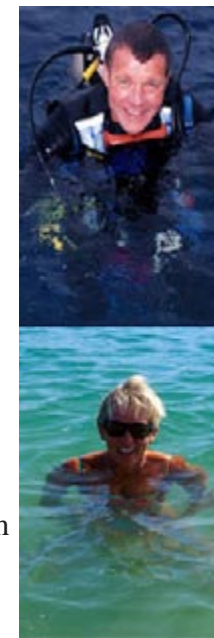
Lankayan Island has been chosen by Martin and Sylvia because it offers something new.

Considered frontier diving in the Sulu Sea, the combination of super macro diving, shallow and quality wrecks and reefs along with the possibility of encounters with larger fish, including the Whale Shark.

The usually calm conditions and the opportunity for shore diving are an added attraction for any underwater photography enthusiast. There are a number of wrecks in the area and there is the possibility of wreck penetration as well as the chance to work with marine life on the exterior of the hull. Jetty Wreck was created by scuttling a small fishing boat just in front of the jetty and you can follow the guide rope from the Jetty at any time of the day or night! In a few minutes you will be there, along with the batfish, a couple of frogfish and some Blue-spotted Stingrays.

Combine the quality of the teaching and photo support, the dive management, the ease of diving (day and night) and the relaxing island environment and you have the ideal ingredients for a great Photoquest.

www.divequest.co.uk



BSoUP/DIVER Print Exhibition London Aquarium

The best prints from this year's BSoUP/DIVER Print Competition are now on display at the Sealife London Aquarium until mid-October.

The original competition organised by the British Society of Underwater Photographers (BsoUP) in association with Diver magazine attracted 160 entries. The top 80 prints were displayed at the London International Dive Show held at ExCel, over the weekend of 28th-29th March 2009. Visitors to the show were invited to vote for their favourite prints in four categories and nearly 1,000 did so. Trophies and prizes were awarded to the winners. An independent panel of judges choose the overall winner to receive a week's diving in the Red Sea donated by Oonasdivers. In addition The Wildlife Trusts awarded prizes for the best British prints.

The competition was sponsored by Oonasdivers, Diver, Sealife London Aquarium, Mike's Dive Stores, Ocean Optics Ltd, Cameras Underwater, Oceanic and Alison Hodge Publishing.

www.bsoup.org



DOMEPORT.COM

DomePort is the "new kid" on the underwater imaging web block!

At DomePort we are responding to the urgent need for the underwater photographers to have their own place on the Internet, where they can share their work with the rest of the community.

DomePort focuses on the image content providing its users with opportunity to create endless personal portfolios, rate each other's photos and participate in competitions. That is because DomePort is loaded with functionalities!

You will also find at DomePort the latest news about underwater imaging equipment, gear reviews, information on events and much more.

Please, feel free to join our ranks by filling the registration form – it's free and simple.

www.domeport.com

Dear UwP Readers:

Now on its **7th Issue**, *Wetpixel Quarterly* brings you the best in underwater imagery in a collectible, coffee-table-worthy publication.

Issue #7 available soon!

Order issues #1-4 in the Year 1 Collector's Edition while still available!

Subscribe and order back issues online:
www.wetpixelquarterly.com

**Florida - Manatees
with Mustard**
5th - 11th February 2010
with Alex Mustard

This short trip includes four full days with the manatees at Crystal River, with boat trips each morning and afternoon.

The manatees are a popular tourist attraction in Florida and seeing them is not the challenge. On this trip we will have our own very spacious boat dedicated to giving us the encounters we crave. We have hired the biggest boat available for our sole use, with the best operation, so there will be plenty of room for everyone and plenty room for your equipment too. Time usually rewards us with the chance to photograph a variety of natural behaviours.

On two afternoons, we will leave Crystal River and travel to Rainbow River, which is one of the clearest springs in the area and a real haven for wildlife. The beautiful river does not contain any manatees, but is a great location to photograph much of Florida's native aquatic wildlife, including several species of freshwater turtles, Sunfish and the prehistoric Spotted Garpike. It is also a very beautiful shallow water wide angle site. Rainbow River can be enjoyed both as a snorkeler and

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as a Scuba diver, but all Manatee encounters will be snorkeling only.

Photographically, this is a wide angle trip. The best all-round lens for the manatees is the Tokina 10-17mm fisheye zoom. The manatees can be photographed either with or without strobes. Alex will be happy to advise you on underwater photography throughout.

This trip is suitable to both certified divers and non-divers. The trip is also highly suitable for terrestrial wildlife photographers keen to expand their portfolio with some underwater images.

www.divequest.co.uk

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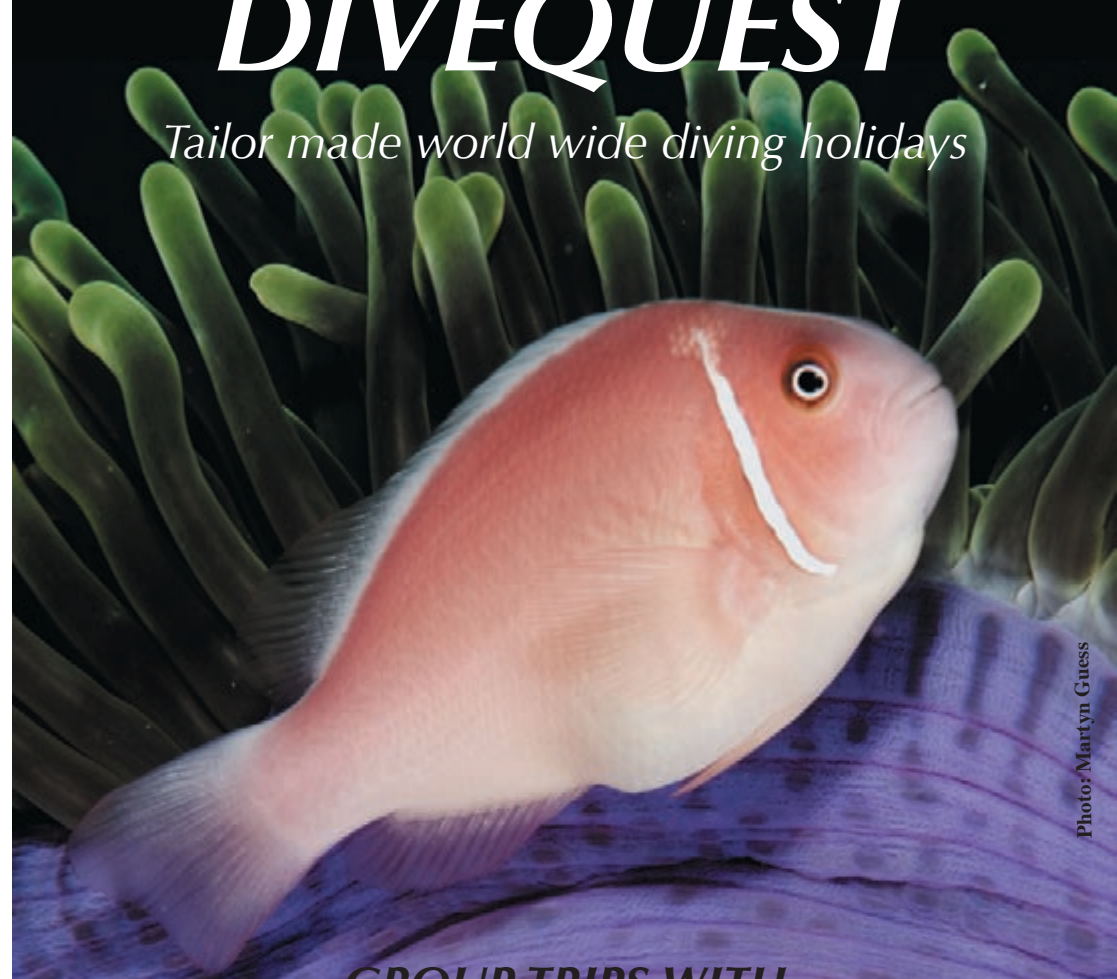


Photo: Martyn Guess

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MARTIN EDGE & ALEX MUSTARD
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WWW.DIVEQUEST.CO.UK

The BSoUP Splash-in results 2009

This year's event took place on Saturday 4th July at the Mount Batten Centre and the National Marine Aquarium, Plymouth. All underwater photographers were invited to participate 'On the Day' to compete for trophies, some fantastic prizes and personal awards. A total of 52 underwater photographers participated in the 'On the Day' competition.

The presentation of entries, the judging and announcement of the winners took place in the National Marine Aquarium's Atlantic tank room, following a BBQ in the grounds.

The winners were as follows:

Close-up category

Anemone by Rick Ayrtton



(As Rick is a beginner, this shot also won the Beginners category)



Wide-angle category

Anemones on wreck by Neil Skilling

BSoUP extends its thanks to Scuba Travel, the National Marine Aquarium, Olympus UK, A.P Valves, Constable & Robinson, Ocean Visions, Sport Diver, Ultimate Sports and Focal Press. BSoUP is the largest underwater photographic society in Britain, catering for both film and digital photographers.



Animal portraits category

Jellyfish by Jim Garland

BSoUP is a not-for-profit organisation, run entirely by volunteers with a passion for underwater photography.

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*Humourous category: Jackson Four by Martin Davies
Overall: Plaice by Cathy Lewis*



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and **SERVICE**
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New Products

Canon PowerShot G11



Canon has announced the launch of the feature packed PowerShot G11, the successor to the multi award-winning PowerShot G10.

Professional photographers will benefit from the G11's greatly expanded dynamic range. Canon's new Dual Anti-Noise System combines a high sensitivity 10.0 Megapixel image sensor with Canon's enhanced DIGIC 4 image processing technology to increase image quality and greatly improve noise performance by up to 2 stops (compared to PowerShot G10). The PowerShot G11 also includes i-Contrast technology, which prevents high-light blowout whilst retaining low-light detail – ideal for difficult lighting situations.

The digital compact includes the ability to shoot in RAW format and is compatible with Canon's Digital Photo Professional (DPP) software, ensuring that photo shoots can be

www.uwpmag.com



easily integrated into a photographer's workflow.

Alongside superb image quality, the compact size of the PowerShot G11 and a 2.8-inch vari-angle PureColor II VA LCD (461k dots) make it the ideal choice for professional photographers to use where an SLR is impractical or obtrusive. The G11 is ergonomically designed for faster, accurate menu scrolling. Analogue style dials for ISO and exposure compensation give photographers instant, familiar access to common settings and features.

Underwater photographers can team the PowerShot G11 with the specially designed Waterproof Case WP-DC34 - an underwater housing allowing full control of the camera at depths down to 40m. The PowerShot G11 includes an HDMI port so users can review images on a full HD screen via an optional HDMI cable.

www.canon.co.uk

SEALUX CC5II Canon 5D MKII housing



We have designed the precision-fit CC5II housing to provide full control underwater. Maximum reliability and ease of operation, perfect grip handling and minimal dimensions are the hallmark of this housing.

Large O-rings, double seal shafts and keys sealed even fourfold guarantee the highest degree of reliability possible. The camera is precision-guided on a special slide and fitted inside the front part of the housing, thereby excluding fitting errors. To replace the memory card the camera does not need to be removed. The grip is mounted at the front of the housing, adjustable and detachable for transport.

www.sealux.de



Seatool Nikon D300 housing



Small and light enough to hand carry on aircraft, the Seatool ND300 offers exceptional underwater balance.

All camera controls are placed within easy reach, even for divers with small hands. The command dials and shutter release are exactly where you expect them to be for effortless operation, even one handed.

Your new Seatool ND300 housing comes standard with connections for optically fired strobes with optional single or dual Nikonos style bulkheads.

The Seatool ND300 offers three viewfinder options: Optical window, 45° or 180° Inon Magnifying Viewfinders.

www.reefphoto.com
www.seatoolusa.com

Aquatica housing for Canon T1i



Aquatica is proud to introduce its new housing for the Canon T1i camera. This exciting product is part of a new line of AQUATICA underwater camera housings that are designed and built from a solid piece of aluminum to take advantage of the new, smaller and less expensive DSLR cameras, making high quality underwater photography and High Definition video more affordable for the recreational diver.

Optical fiber strobe connections along with the more classic Nikonos and Ikelite bulkhead connectors are now offered as an option, making this Aquatica housing one of the most versatile as far as strobe connections goes, controls are supplied for accessing the built flash of the Canon T1i controls.

Made of precision machined aluminum and anodized to military specification, the new and affordable Aquatica T1i housing was crafted with the user in mind. It features all of the controls for still or video features favored by professionals in a compact, lightweight and easy-to-use design.

Built around Aquatica's well established bayonet port system, this new Aquatica housing will accommodate all current ports, extension rings and gears.

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www.aquatica.ca

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www.scubasympphony.com



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The Seatool XR500 & XR520 underwater housing for the Sony HDV Handycam XR500 & XR520 is one of the smallest, lightest underwater video housings ever produced.

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Aquatica HD Wave for Canon HF S10/100



Aquatica have announced their new aluminium housing for the Canon HF S10/100 video cameras.

They have a 30° angled large 2.7" LCD viewfinder for easy viewing and a new hybrid design - mechanical controls combined with electronics will allow access to almost all camcorder functions, including the

crucial manual white balance.

The optics include a wide angle port with macro adapter giving 65°FOV with full zoom through & 85°FOV with partial zooming.

They have 300 feet/ 90 meter operating depth and are compact & only weigh 8 lbs.

www.aquatica.ca

Seahorn accessories



Seahorn accessories for underwater housings are now available exclusively from www.scubasympphony.com

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This housing is compatible with 2nd generation Flip models U1120

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The RDX-500D housing is a reworking of the popular RDX-450D which now allows you to make full use of the EOS 500D's HD video function. In addition, the RDX-500D housing also accommodate the EOS 450D camera. Available as the housing only (#06150) or as a package for the camera body and 18-55mm kit lens which includes the RDX-500D housing and the RDX-Standard Port.

Mounting the camera is a breeze. You need only to slide the camera quick shoe into the slot up to the designated position. There is almost no need for complicated position and gear alignments so even beginners can easily mount a camera.

Simply by connecting the Fibre-optic cable (L-type) to the connector, the cameras built-in flash is used to trigger an external strobe. This is considerably less complicated than setting up a hardwired sync cable. It also eliminates any possibility of leaks when the connector is submerged in water.

TTL Flash is available when using an optional YS Converter/C and compatible Sea&Sea YS series strobes.

A 0.5x pick-up viewfinder makes it easy to see the cameras

entire viewfinder. Optional exchangeable viewfinders are also available.

There is a new line-up of ports including the RDX Standard Port (for most standard zoom lenses), the RDX Port Base L (for joint use with NX-series ports) and the RDX Port Base S (for joint use with compact macro ports). A wide range of lenses that can be used when selecting the appropriate port base and port.

There is a new type of 'easily operated' shutter lever; excellent for quick snapshots and to avoid motion blur. The shutter lever can be operated in two ways – by pressing from the top or squeezing from the front – and offers a smooth halfway press for adjusting autofocus, so no need to worry about missed shots.

Construction: Polycarbonate

Depth rating: 60m (200ft)

Dimensions (WxHxD):

200x190x139.5mm

Weight: Approx. 2kg (Housing only)



Suggested retail prices;
Housing only: (#06150) £1014.35 inc. VAT

Housing & RDX Standard Port package (#06628): £1237.95 inc. VAT.

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10Bar Nikon D90 housing

The new aluminium NA series Housing for Nikon D90 from 10Bar has an ergonomic design of levers and dedicated buttons which allows full control of the camera functions.

The housing features 2 new innovations. The first is a port lock mechanism and the second is a wide port opening together with NA adapter to help photographers make use most of their existing ports.

The housings are individually tested to 90 m / 300 ft and given a



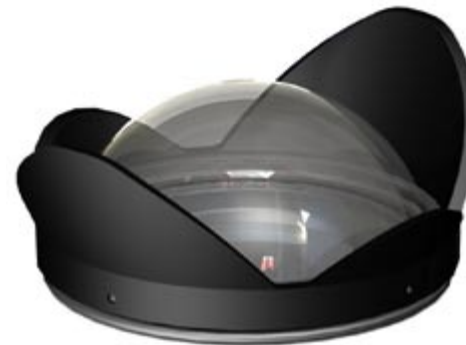
depth rating of 75 meters. Dimension 344mm x 195mm x 133mm. Weight Approx. 2kg (Housing only)

www.10bar.com

Fantasea BigEye Lenses

Fantasea's BigEye Lenses makes use of a new patented lens technology, which allows for high quality underwater wide angle images free of distortion.

The new technology uses air instead of glass as an optical element and recovers 100% of the camera lens optical properties underwater. The BigEye lens is available for the Canon G10 underwater housing (WP-DC28), Fuji FXF 100/200, M67 and M46



threads which fits over the housing's port and can be installed and removed underwater. Perfect for shooting seascape, divers, ship wrecks and schools of fish.

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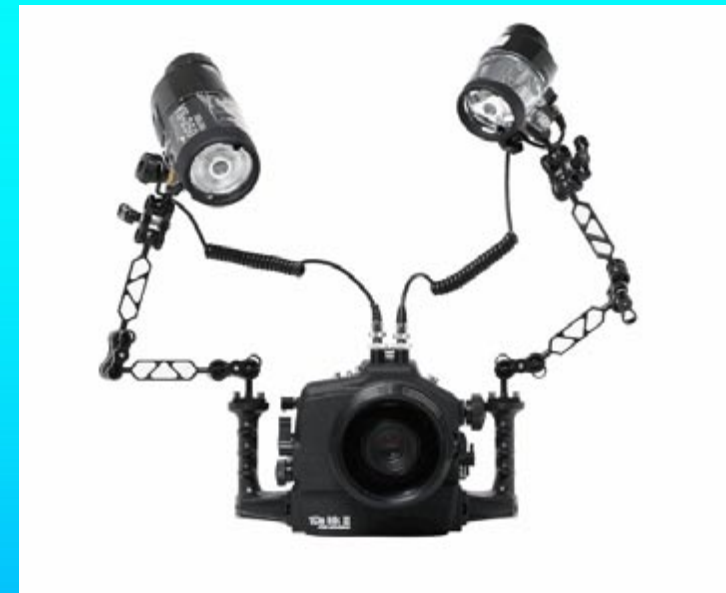
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Aquatica AD90 Review

Into the Deep with HD and RAW

by Tim Rock

I'm sure many of you reacted as I did when the Nikon D90 was first announced and the news that this DSLR included HD video. Being an old TV news guy, I thought the opportunity to play with HD was a real bonus. Plus, this camera had a lot of bang for the buck.

The sensor in the D90 is about as good as it gets for this class of camera at this time. The camera is small and a bit light but with a power grip, it adds just enough weight and bulk and feels really good above the water. I've used it on assignments and the playback window is large and colorful, so you can tell at a glance if you have a nice shot.

So when the housing arrived from Aquatica, I was happy to see it was also small, compact and light. Mine has a shiny, spackled black finish and looks pretty cool. The camera fits the housing like a glove and it has a lot of buttons. This means virtually every function is accessible underwater. That means roughly 40 buttons, knobs, bulkheads and other appendages poke out from the housing body.

Like most cameras nowadays,

you don't need 80% of the functions available. But its nice to know should a situation present itself and you have sufficiently memorized the manual, you can do just anything you want while cavorting with the turtles and fishes. There's even an editing function so you can kill deco time by working on your show. Read the section in the accompanying Aquatica manual that says "Controls in Detail" if you're not sure what button does what to what.

All of the Aquatica ports work on this housing and there is a lens port and gear chart that comes with the manual or you can ask your Aquatica dealer just what you need for your lens of choice. This chart is also found at www.aquatica.ca.

My favorite lens is the Tokina 10-17mm wide angle zoom. Even though the chart suggests a modest extension ring, using the 8" dome the lens does focus sharp and clear without it. The macro shots and fish in this review were shot with a Sigma 50mm Macro lens. It is also my favorite as I can shoot anything from shark and diver portraits all way down to Christmas tree worms and pygmy





seahorses.

There is a new AD90 housing function called a port lock. I overlooked this little gem about three dives into my Philippines trip and the results weren't pretty or dry. Don't ask. Read about it and use it properly and the port now clicks into place and cannot be budged. Accurately, its called the Port Release Mechanism Button. There is a long section about it that I adroitly managed to overlook.

The quick release tray is small and allows you to change batteries now without taking the tray off the camera. You still have to take it out of the housing, but that's a snap as its goes in and out on two posts so the camera always stays perfectly in place. The hotshoe lead is also longer so you can quickly change cards and batteries by just sliding the tray out a

www.uwpmag.com

bit, do your work and slide it back in. Hotshoe stays connected.

I shoot everything in Manual mode but this camera has iTTL capabilities. This is really good news for macro enthusiasts who like to use this setting. It is usually quite good to excellent for close-up exposures. Wide angle can let in a bit more light and fool the camera sometimes. But many macro guys swear by iTTL. So now if you want it, you got it.

My first series of shots along the South Airport reefs at Tubbataha were a bit of a surprise. They seemed overexposed. Then I remembered the default ISO for this camera is 200. I was used to 100 in virtually every other DSLR I had ever used. So this meant faster shutter speeds and higher F-stops. There is a way to get around this using the Lo-1 setting, which can



make highlights more critical. But, this setting also has greater dynamic range (a very good thing) and less noise than ISO 200. Basically, the lower the ISO setting means the lower the noise and the higher the dynamic range will be. This is because below the lowest numbered ISO, the raw data is shifted toward the right; so there is an increased possibility of clipping highlights. But the color and overall photo is strong and vibrant. But I have been using the default ISO 200 most of the time and am getting used to the greater depth-of-field and other pluses that using more light can

bring. It especially helps with fast moving objects like dolphins where you can crank up the shutter speed for natural light.

The housing has a large window equal to that of the D90 so reviewing is a real pleasure. The size allows you to get into smaller spaces and close for CFWA shots. With strobes attached, the weight is still fine. Bigger housings can give you photographer arm (or neck) at the end of the dive. But the fatigue factor is low with this.

So how about the video?

Well, Nikon didn't design this

aspect very well quite frankly. Even when you thumb through the D90 manual, you'll be hard pressed to find out much about this popular and groundbreaking DSLR function. At this writing, the Nikon D300s was out with a better system and Canon's higher end EOS 5D Mark II is also available.

But for us beer and burger guys, hey, it is HD. There are also lower video settings that give longer recording time and don't chew up so much card space. However this HD setting doesn't really chew up as much as you'd think. It looks pretty good and sounds fine (its mono). And the beauty of this is that you can pretty quickly get used to the few hoops Nikon wants you to jump through as far as focus goes and go right from shooting stills into video mode with a couple of quick button pushes. The housing is small enough so this can all be done with your right thumb.

And if the action is fast and furious and would make a great still image, you can shoot stills right in the middle of video recording. You can also use the LIVE VIEW setting, which activates the electronic SLR function and makes the review screen live. This is how you record video but it's useful in still composition as well.

Hand holding this little housing and keeping a nice steady shot while

swimming isn't so bad. Even shooting a wide video shot is pretty easy if you keep yourself weighted down and your elbows tucked into your chest. For viewing, in shallower water you could use some sort of lens hood, especially with a strong sun at your back. But down past 20 feet, there's not much of a problem. Colorwise, a Magic Filter is helpful if video is the main goal of the dive. I suspect if you wanted, you could add video lights to the equation but you'd have to turn them on and off manually.

In my short diving experience with this unit its best used as a still camera with the video there if the situation presents itself. For macro, the D90 focusing again represents a challenge. For really small stuff, you have to pre-focus and then change to video mode. The camera then retains that focus and depth-of-field. So to really have a frustrating dive, I shot video of really small or really active marine life in Guam's Tumon Bay Marine Preserve with a flat port and a Sigma 50mm macro lens.

I quickly found that a small, weighted tripod would have helped me greatly. Even holding it solid to the sand showed a bit of sway. I was able to manage enough shots for cutaway length images (a good 2-3 seconds). But longer macro video sequences require a bit of planning. I also tried carrying a clip-on 2-pound



weight and this did help quite a bit with handheld video macro and close-ups. But a sacrificial tripod would be needed for any sort of real production.

In all, I've really been having fun with this housing, which is what it's all about. It's a light, rugged, professional quality housing that you expect from Aquatica and it will open new horizons for the creative demons in you waiting to explode on the silver screen... er, RGB monitor.

See sample video on YouTube

<http://www.youtube.com/watch?v=OiF9ed1j9dA>

Successful innovations by Nikon and Aquatica make this combination a great little tool for the amateur and pro.

Tim Rock
www.doubleblue.com

Tim Rock is a professional photojournalist and Lonely Planet contract author based in Guam, Micronesia.

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Canon D10

by Rob Spray

This is one camera which pictures don't do justice. As soon as you pick it up the bulbous curves fit into your hands the way a cuboid just can't. It's Canon's first waterproof digital camera, back last century they had APS snorkelling models but it's been a long dry spell. Interestingly they haven't toyed with more conservative ratings, the D10 is rated to a market leading 10m (i.e. Olympus matching). It sits at the top of a range of one! Price and size wise it's top of the market too. The name is odd, fitting the scheme Canon uses for SLRs but there's absolutely no chance of confusion in the flesh!

Appearance dominates a first encounter with the D10. There's plenty of shiny bits, exposed stainless fasteners and all those curves to play in the light. It takes a while to spot that while there is metal, the vast majority of the body is painted plastic, so the beautiful finish may suffer from bumps and scrapes. The internal frame is metal allowing the most extrovert flourish on the D10, lanyard fixing points at each corner. Real statement pieces of machining these allow the camera to be attached to an amazing cast, locking 'nipple' in three ways

more than necessary.

The rating puts it head to head with the third 10m Olympus model, the TOUGH 8000. It seems quite clear that Canon have taken note of their experience and the D10 seals look very impressive. The waterproofing of the D10 takes a slightly different tack from the Olympus. Both have two hatches and on both the smaller has just a lipped gasket but the larger is fitted with a real 'o'ring on the D10 where Olympus stick with a larger lipped rubber gasket. Both work fine, we can confirm that both are effective to double their rated depth. The 'o' ring will be more fiddly to clean and should be lightly greased, which makes debris stick to it...

The two companies have chosen different basis of their designs with the D10 quite conventional within its Faberge egg casing and Olympus using folded optics, lots more exterior metal and more of a Rolex motif. The use of a conventional lens has both strengths and weaknesses. The Canon lens is brighter, at f2.8, than any competitor but has more limited range and less effective macro. Close up the protruding lens casts flash shadows on small subjects, this vignetting is increased by a stout aluminium ring which secures the front port and could so easily have been threaded for filters and extra lenses. As the case must rigidly cover the lens in all positions



it cannot retract so the D10 isn't a true pocket camera, unless you want to enjoy some Carry On humour of course :-). The 3x zoom starting at the equivalent of 35mm is the least flexible lens in this part of the market with many competitors starting at 28mm.

Putting what seems to be a Powershot chassis into a case instantly benefits from the development of that very successful line and the D10 is fast and logical to use. Like the Olympi it assumes you will probably

use Auto or Program and keeps its welter of scene modes accessible but compact. Shooting video is given top level status rather than hidden which is a good choice given the likely use of the D10 for family holidays.

The control layout of the D10 will be familiar to anyone who has tried a Canon Powershot, bar the use of buttons for zoom control and mode switching - instead of hard to seal dials and sliders. The ergonomics are easy to figure out and the two button for the two level - picture and system

– menu is a treat after digging through some others. Its a shame that macro is always its second focus choice after landscape as I'm a fiend for small stuff and I'm not sure I've ever been so surprised by a mountain that I needed that option first under my trigger finger.

Unlike a lot of compacts these days the D10 has no internal memory for pictures. Surprisingly there's no small card in the box either, bear this in mind if you plan to present one as a gift.

As we went on we had to keep lowering our expectations on battery life, days underwater really do drain it when you use flash and have the screen on for long periods. In use which included quite a lot of menu hopping and flash use we managed 140-160 shots per charge, not very impressive. As usual with a small camera a spare battery is part of the kit you'll want for a day out.

There's no case supplied, which is a shame as that groovy paint job deserves protection. Given the price a neoprene slip case would have been a great addition to the package – and help the camera float if it falls out of reach, it sinks on its own! I assume other colours will become available as the current splash of blue is a separate panel.

In water it's strange to handle a 'naked' camera, much easier to see

the control markings than one which is housed. With bare hands the cluster of small buttons isn't a problem but in colder water any gloves make it hard to feel those which are recessed beside the screen. The soap-like shape is also predictably slippery in gloved hands. The lanyard 'nipple' can be moved to suit your grip but can't be said to make a vast difference.

I'm pleased to say the D10 returned some good looking results from its first dive. The default program setting allowed it to use a fast enough shutter and strong enough flash so that the vivid underwater world of the Dutch oyster beds lit up in all their surprising glory. What was more surprising was that the D10 didn't struggle to focus in the cloudy, albeit bright shallow waters. Even at macro distances it was quite straightforward to get sharp results. The one fly in the ointment is that with the projecting lens surround and flash set well back, subjects less than 15cm away are masked from the flash. However as the working distance stays at 30cm throughout the zoom range (the minimum 3cm minimum distance is available only at fully wide) it is still practical to photograph quite small animals, although focus is more ponderous at telephoto. The easy access to video shooting makes it simple to capture clips to show friends. The clips are



Dawn really took to the D10, though it's tricky to use in gloves

fine but with many cameras offering HD capture its a shame that the D10 only offers VGA. Still camera video is still a bit of a novelty but this is fine for YouTube to show the lobster that went for you! Each 1 minute of video takes the place of about 40 full size photos, so even with just a 1 GB card you have room for about 12 minutes of video (or 340 pictures).

I suspect for many people using exactly the same camera underwater, with no housing, might get them past the mental block some have about

submerged photography and ease them into this hobby. The 10m depth limit is going to cramp your style for a lot of diving but a tropical snorkeller could get great use out of. The screen is bright and contrasty making use in the shallows quite practical and sharp enough that the option to enlarge the screen centre as focus confirmation was genuinely useful.

At low ISO pictures are very good but noise reduction creeps in fast as film speed increases. Image stabilisation means the D10 can hold



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Some of the reef residents are quite feisty

low ISO longer and controls what noise there is well. Shots at ISO50-160 are really very sharp, beyond ISO200 you won't enjoy all your 12 Megapixels as detail is reduced. This is done well and for most uses high ISO turns out attractive results. On the surface the D10 seemed slightly too liberal in handling highlights, quite willing to burnout even central detail to keep the overall exposure on track. For the most part that produced punchy photos but occasionally faces would get the treatment and spoil a picture. My girlfriend, who abhors all

things technical, found the menus easy but was annoyed that every power cycle dropped her settings for macro and zoom.

The lanyard nipple system offers plenty of choice, which is marvellous of course, but why make it like a bar of soap to start with? A few bumps or some rubber on the right hand side would have worked wonders and also protected the case. In common with a lot of cameras it would have been sensible to raise or dimple the shutter button to make it easier to find with cold and/or gloved hands.



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It was good going for a compact to catch these arguing fish

It's very easy to be seduced by the looks of the D10 and assume it's just a good time Charlie, a toy. Underneath the sexy skin is a nice, amenable camera of the kind you would have been very happy to use a year or so ago before everything had to be complicated. That's not to say it isn't capable, the 12 Megapixel sensor produces clean, sharp pictures on and under water which you could make into posters. The user interface is the best kind of simple which means you can take advantage of those moments you bought a waterproof camera to



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This crops shows the excellent low ISO detail

capture.

Pros: Great looks, good results straight away underwater, easy menu ergonomics and flexible modes

Cons: Protruding lens bulky and masks macro flash, no case, easily scraped, extrovert nipple! Below average battery life. Auto power off short.

Rob Spray

www.1townhouses.co.uk

Bikini Atoll is now closed once again. But you can take a dive trip for just \$4.95 and see the majesty of the "Nuclear Fleet!"



By popular demand an expanded version of the eBook, *Ghost Fleet of Bikini Atoll* by Joseph C. Dovala, is now available. With almost 4x the pages it contains nearly 100 photos and much more text. The book is in PDF file format easily read by a number of free existing software programs such as Acrobat Reader. Electronic photo books, or eBooks, are able to showcase high quality images and text in a new, exciting, inexpensive, and environmentally friendly way. They have relatively small file sizes, usually less than 20mb. *Ghost Fleet of Bikini Atoll* (12mb, 89 pages) is only \$4.95 (US) each emailed. Please visit www.jcdovala.com for details.



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Wide Angle Zoom Macro

by Mark Webster

Underwater photography, in common with most things in life, is full of coincidences. I read with interest the article in the last issue of UWP by Alex Mustard and Jeff Hartog on their trials with fish eyes and fish eye zooms with teleconverters as this echoed my own recent experiments.

Like many other photographers I am considering an upgrade (some former film users may say return) to a full frame camera from my present DX equipment. Although I am probably waiting for the promised D700X I have been following the ideal lens debate with some interest. One of the FX problems is the performance of the rectilinear zoom lenses in particular the 14-24mm which seems to be very difficult to set up behind a dome. If you have been using the Tokina 10-17mm on DX then you will very disappointed at the prospect of losing the flexibility of this lens on full frame. However, the solution that Jeff has been experimenting with is to use this lens with a 1.4X teleconverter which produces a range similar to the 14-24mm zoom. I had been following the results of Jeff's trials with curiosity on the Wetpixel forum.

This started me thinking about how this lens would behave on a DX format with a teleconverter for close focus wide angle images and I was surprised to find that with a 2X teleconverter I could focus on something surprisingly small as well as medium sized wide angle subjects. So it was time



for some experimentation in the water but first of all I needed a zoom gear with an extension in order to use the lens in my Subal housing. Being an obsessive horder, I have a box full of old zoom gears and assorted bits from numerous housings and lenses and I was delighted to find that a combination of an old Hugyfot aperture spacer ring (Nikon F2A!), a home engineered 105mm extension sleeve and a 60mm manual gear provided exactly what was needed.



Tokina 10-17mm zoom with 2X teleconverter and zoom ring mounted on D300.

(Left) The medium wide end of the lens is suitable for reef scenic shots and CWFA compositions. Nikon D300, Subal ND20, 10-17mm FE zoom, 2X teleconverter, Subtronic Mini flash guns, ISO100, f11 1/60.

(Below) Larger macro subjects like this lobster spider crab are also ideal for the zoom range. Nikon D300, Subal ND20, 10-17mm FE zoom, 2X teleconverter, Subtronic Mini flash guns, ISO100, f11 1/60.





Each of the nudibranchs in this image are 12mm or less in length, distance from the dome to the subject approximately 50-60mm. Nikon D300, Subal ND20, 10-17mm FE zoom, 2X teleconverter, Subtronic Mini flash guns, ISO100, f14 1/25.

One of the concerns that I had was the potential for poor auto focus performance as this lens is a f3.5-4.5 and adding a 2x converter could compromise this. On this score I was pleasantly surprised to find that even in low light the lens had little trouble in focussing and locking onto subjects either very close to the lens or at a distance of 1-2m. Another pleasant surprise was just how close I could focus on a subject and the level of magnification produced.

My primary subjects for this experiment were some small nudibranch species which are found in large numbers mating in spring and early summer on some of my local dive sites. These nudibranchs are only 12-24mm in length (1/2" to 1") and so were a good subject to test the theory on. As can be seen on the accompanying images the larger species are quite dominant in the frame and still leave enough



If a larger subject turns up, like this John Dory approximately 350mm in length, then the lens will operate as a medium wide angle zoom. Nikon D300, Subal ND20, 10-17mm FE zoom, 2X teleconverter, Subtronic Mini flash guns, ISO100, f8 1/25.

of the wide background to include a sunburst or a reef background. Almost like a double exposure from our film days in the finished image.

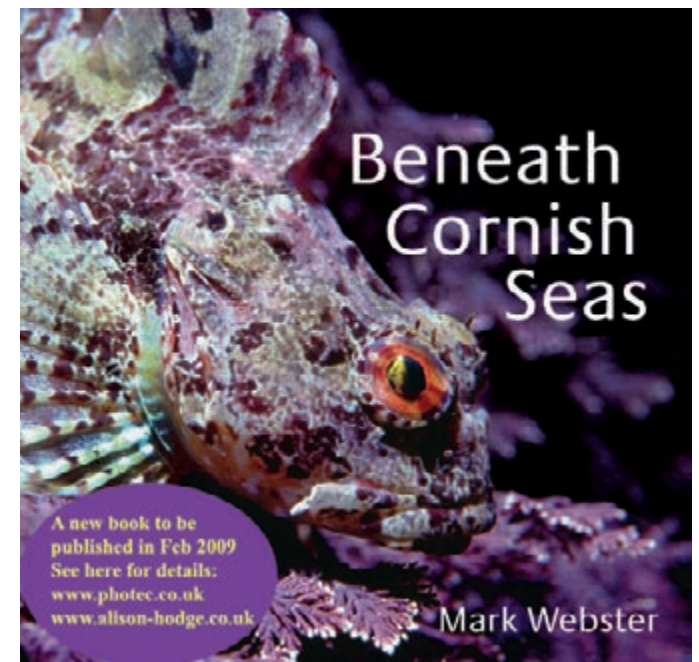
You will of course need to use an extension ring and a small dome to take similar images. For these shots I used a 35mm extension ring and an old Subal DP54 which was originally designed for the Nikkor 20mm lens. You do not need a full fish eye dome as the angle of view of the lens has been reduced dramatically (approximately 90-100 degrees at the wide end). However, you do need this much smaller shallow radius dome to enable you to get close enough to the subject and to be able to light it.

Despite losing the extreme wide angle properties of the lens the zoom range is very useful. You can capture subjects between a true macro reproduction and medium sized subjects and when

a larger subject turns up you can still capture it with your now medium wide angle lens as can be seen from the other examples here.

Whether you like the resulting macro images is of course down to personal taste. But the message should be to keep messing around with unusual lens combinations and never throw out those old bits of gears etc.! This was a little like turning the clock back to my early full frame film days when I produced similar compositions with a Nikonos 15mm lens and extension tubes. It worked well but positioning the subject and knowing when you had sharp focus were nowhere near as easy as with this combination, which also has the added flexibility of a zoom range.

Mark Webster
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The Canon 5D Mark II for video

By Berkley White

Every now and then a camera comes along that makes you rethink possibilities. Like many fellow still photographers, the 1080p video of the Canon 5D Mark II forced me to reconsider a personal interest in moving pictures. The more I played with 5D Mark II shooting video, the more I kept leaving my Nikon D3 and D3x on the boat.

The sensor size on the 5D Mark II is by far the largest of all the cameras in this chart, including the top cinema camera choice, RED. This results in a cleaner, lower noise image.

The first obvious thing is that the 5D Mark II sensor is the large. Larger sensors can gather more light, and thus can produce images with lower noise when compared to smaller sensors. While it may seem limiting to only have a frame rate choice of 30p, this is by far the most popular frame rate and will satisfy almost all users needs. The H.264 compression format is more efficient than HDV or MPEG and results in a better quality image at the same file size. This combined with a higher bit rate than the FX1 or EX1 results in less compression being applied, and therefore a higher quality image.

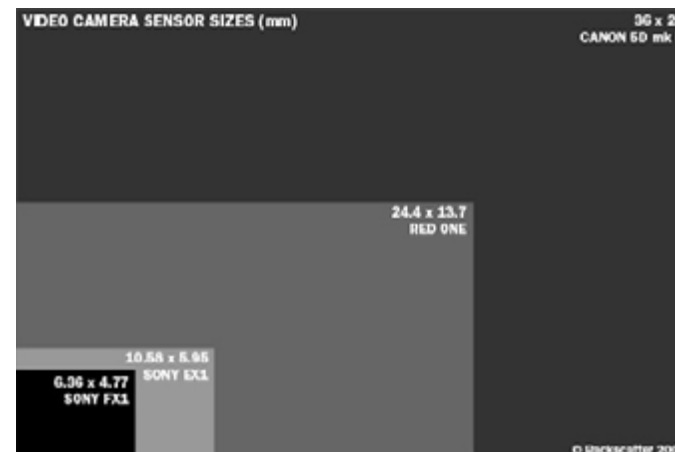
The 5D Mark II is unique as it is currently the only full frame DSLR capable of recording 1080p high definition video at 30 frames per second. Many video cameras can claim to shoot 1080 video, but video cameras at even twice the price don't offer 30 progressive frames per second, a smorgasbord of interchangeable lenses, or the benefits of a full frame 35mm sensor.

Topside photographers and filmmakers have



already proved this camera to be a professional level multi-tool for capturing still and motion images. However, for underwater image makers, this camera is even more valuable. With the ability to shoot top quality stills, and HD broadcast quality video, a working pro or enthusiastic amateur shooter can save thousands of dollars. By consolidating separate video and photo rigs into one unit that is much smaller and lighter than a typical Sony FX1 or EX1 system, one can save hundreds in excess baggage fees alone. We were able to pack our 5D Mark II system with both video lights and strobes into a single Pelican 1620 case. More traditional pro level systems with lights and heavy underwater optics can easily spill over into 2 cases.

Experienced still shooters interested in video will feel much more at ease with a DSLR in video mode than someone used to a traditional video camera. The concept of shutter speed, aperture, and ISO controls are more familiar to still shooters than controls such as gain on traditional video cameras.



The sensor size on the 5D Mark II is by far the largest of all the cameras in this chart, including the top cinema camera choice, RED. This results in a cleaner, lower noise image.



The dynamic range of the Canon 5D Mark II shines through on this frame grab. Even when overexposed, this camera delivers video with better dynamic range than any professional video camera at such a low price.

Shooting video with the 5D Mark II does not require advanced skills, but does require advanced determination. It can be point and shoot friendly



The 5D Mark II produces inky blacks and smooth blues even when shot at high ISO settings.

with great results, but a studious shooter can quickly turn this camera into visual magic.

Experienced video shooters will be impressed by this camera's small size, optical selection, and will enjoy the user-friendly ergonomics of a DSLR. Unlike most pro-level video cameras sealed up in underwater housings, essential controls are within easy reach, within sight, and minimize your requirement to remove your hands from the housing grips.

Dynamic Range

Unfortunately for us underwater shooters, cyan (underwater blue) is the most difficult color to record in any digital format. Underwater images shot into the sun typically suffer from harsh banding. In the dolphin video frame below, I was stunned at the minimal banding and the impressive capture of light rays in such a high-contrast video clip. As a still, I could have captured a tighter sunball with a higher aperture setting, but this would have turned the dolphins into a silhouette.



In video mode, your f-stop and shutter speed values are displayed at the bottom of the LCD. To determine best exposure, shoot a test clip (or photo) and check the three channel histogram display in playback mode.

As a motion sequence locked at one exposure, I'm thrilled to get such a dynamic range.

The 5D Mark II's treatment of cyan (blue) color near the sun is very forgiving for both stills and video. Nikon bodies tend to hold a tighter sunball, but can frequently suffer from an intense cyan band near the sun. The Canon 5D Mark II produces a larger and more mushy sunball, but it is less prone to banding and produces a very pleasing image.

High ISO Advantages

In underwater photography, we select cameras with larger sensors to decrease noise at high ISO settings. Noise typically shows up in the shadows and is further enhanced in out-of-focus areas. I shot most test video at ISO 400-800 in the movie above and struggled to see noise in any clip.

As with any digital camera, the high ISO files are fragile and quickly fall apart with any color correction. I only applied color correction to the eagle ray clip in the movie as I shot it slightly hot



The Canon camera was in an Aquatica housing mounted onto a scooter. Photo by Tony Granata

and it looked washed out without a little help. I left this shot in the movie as I think it shows a little banding in the background due to color correction applied to an ISO 640 shot.

The moral of the story is shoot up to ISO 800, but use caution with exposure settings over ISO 400.

Manual exposure

Traditional video cameras are difficult to control in manual exposure. Many force you to use touch screen controls or completely lack the ability to independently control ISO (gain), shutter speed, and aperture.

In video mode, your f-stop and shutter speed values are displayed at the bottom of the LCD. To determine best exposure, shoot a test clip (or photo) and check the three channel histogram display in playback mode.

With the latest firmware update, the Canon 5D Mark II offers all these controls and maps very well to ergonomics of an underwater housing. Essential exposure controls can be easily performed with one hand while the second hand is stabilizing the shot.

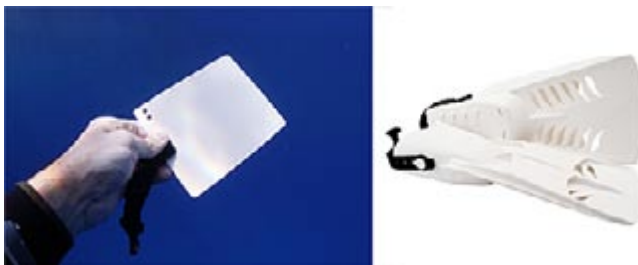
All clips in the movie above were shot in manual exposure. I did waste a day shooting auto exposure video with the 5D Mark II, but as with most video cameras, auto exposure modes tend to over expose the scene and produce flat images.

You can certainly get great video in auto exposure, but the 5D Mark II sensor is so forgiving, you will be quickly rewarded after your first day of shooting manual. I shot a few still shots as test exposures in photo mode and used the three channel histogram as a guide. You don't need to jump from video mode to photo mode for exposure detail. A simple press of the shutter release will always show you a test image with histogram feedback if you set the review window to display the three channel histogram.

Manual White Balance—Faster and More Flexible

Experienced underwater video shooters know that manual white balance is essential. Larger professional video cameras usually have a button dedicated to manual white balance while compact video cameras bury this feature in touch screen menus. The Canon 5D Mark II white balance requires taking a still shot and multiple button presses, but all buttons are easy to reach and can be performed more quickly than touch screen type controls.

Traditional video cameras frequently are not able to capture manual white balance at underwater



To set a manual white balance you must point the camera at a white object such as a dive slate. Some professionals are swimming the new white APS MantaRay Fins and thus always have a white object on hand... um, on foot.

depths below 40 feet. In my tests, the 5D Mark II had no difficulties with manual white balance at my maximum depths of 80 feet. On a side note, I pointed my camera on a white dive slate to set a manual white balance for this video. The Backscatter crew recently discovered the white lighting color of APS MantaRay Fins. Many pro shooters are swimming these fins as they make an easy hands-free target for a manual white balance.

Small Depth of Field

In addition to low noise at high ISO settings, full frame sensors also have less depth of field than the smaller sensors found in traditional video cameras. This might seem like a bad thing, but it's actually the main reason why so many topside shooters are drawn to this camera. A thin depth of field will produce an out of focus background and thus help attract attention on a sharply focused subject. This technique is used beautifully in motion pictures, and is best achieved with lenses of 50mm or longer when setting the lens to a wide aperture.



Underwater color correction filters are essential for underwater video and can be mounted on the front of a traditional video camera or on the front or back of DSLR wide angle lenses.

With a larger sensor, underwater video shooters can now enjoy out of focus backgrounds previously limited to still photography.

Full frame sensors offer narrow depth of field making it easier to blur distracting backgrounds and draw focus to the subject.

Professional Lens Selection

For the last 15 years, only a few professional video cameras have offered interchangeable lenses, and very few of them had underwater housings available due to the very high cost. All compact video cameras have been limited to a built-in zoom lens with a filter thread to attach adapter lenses.

The SLR format offers a huge selection of lenses that can be transferred from camera to camera and can be outfitted in underwater camera housings much easier and less expensively. SLR optics are also supported by many more manufacturers and have received much more critical analysis in the topside and underwater shooting communities.



The most popular lenses for underwater use include the Canon 17-40mm, Canon 16-35mm II, Canon 100mm, and Canon 15mm Fishseye.

The main attraction for me is the 5D Mark II's ability to shoot the underwater optical wonder known as the fisheye lens. Full frame fisheye lenses offer 180 degrees of coverage and are in the silver bullet class of lenses for underwater imaging. No existing video camera shoots this essential angle of coverage for underwater productions. My favorite lens would be a tack sharp zoom from 160 to 90 degrees on a full frame sensor. The best match so far remains the Tokina 10-17mm for DX crop sensor cameras. Despite the Tokina's popularity among photographers, it is unlikely we will see a full frame equivalent in the near future.

Quality

It's more than a little disappointing to watch this video on the web. There's so much motion, even the best delivery video codec at low bit rates seems to turn it into mush. Watching my final high resolution version in full 1080p on a 52 inch LCD HDTV is the real reward for all this effort. When played from my computer on the HDTV, my

little video looks sharper and has better color than even the best HD broadcast. I'm not trying to be a filmmaker, but I'm now capable of capturing video resolution that has the look and feel of being there.

The Disadvantages

No Live Autofocus

Probably the greatest downside of the 5D Mark II in video mode is the lack of auto focus while recording video. Traditional video cameras such as the Sony XR520 and Canon S10 are easier to point and shoot, as they can continually focus while recording. While this lack of autofocus during recording is OK for wide angle shots, it really requires use of a tripod when shooting macro.

Due to this focus limitation, wide angle lenses are more easily used. The larger depth of field inherent in wide angle optics is forgiving and you can easily lock your focus on your fin for distant subjects or minimum focus for close passing subjects.

Macro lenses and moving macro critters are more difficult. It is best to use a tripod for these subjects and plan your shots to allow the subject to move in and out of focus. This might sound difficult, but the images obtained are so much more unique and interesting.

Limited Zoom While Shooting

Many modern SLR lenses shift focus during extreme zooms. Thus you will need to minimize use of zoom during all shots. This is not a huge problem as zooming while shooting usually looks unnatural

and is rarely used in professional work. This disadvantage might be a great feature in disguise to use better shooting techniques.

Evil Sensor Dust

DSLR users are very familiar with the negative aspects of dust on imaging sensors. Black dust specks on a still image is a minor nuisance that can be fixed with a click in Photoshop. However, removing dust from a long video clip requires advanced editing skills and rendering time.

On my first day of video testing, I realized a need to clean up my act. I now take the extra time to use lens and body caps, blow out my mirror box with a Rocket Blaster, and shoot a test exposure of a blue sky each morning to check for new dust.

Cleaning a sensor is actually quite easy and something every DSLR user should feel comfortable to perform. I've tried many cleaning systems, but since I frequently have o-ring grease on my hands, I prefer one time use disposable Sensor Swabs for both lint plucking and wet solution cleaning. If you need reading glasses or are working in low light, the Delkin Sensor Scope is an essential tool to help visually identify the exact location of offensive dust on the sensor and is a great tool to use when you can't shoot a test image of blue sky at midnight.

No Viewfinder When Shooting Video

When shooting in very high ambient light, optical viewfinders can be helpful to verify focus and framing. The 5D Mark II shoots video in live view mode and restricts framing and focus feedback to the LCD monitor. Aftermarket companies offer



No Flip-in Filters or interchangeable lenses

Most traditional video shooters will groan at the loss of a flip-in color correction filter and the need to use a dedicated lens for either macro or wide angle. These users are accustomed to being able to shoot wide angle and macro subjects on the same dive, and with the ability to switch between ambient light shots with a filter and artificial lighting with video lights on the fly. Current SLR shooters will have an easier time adjusting to this as they are already accustomed to these limitations.

Limited Clip Length

The 5D Mark II limits clip lengths to a maximum size of 4GB. This amounts to about 12 minutes of video. You can immediately start shooting another clip after the limit is reached. This is not much of an issue as a continuous shot 12 minutes long without editing will probably be pretty boring to watch. I haven't even come close to reaching the limit so far.

Berkley White
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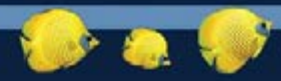
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Out In The Blue At “Mexico’s Galapagos”

by **Jeremy Cuff**

The Socorro Islands are also known as the tongue twisting Revillagigedo Islands and are sometimes referred to as “Mexico’s Galapagos”. They’re located on Mexico’s Pacific side, some 250 miles due south of the tip of the Baja California peninsula. It’s a great destination for photographers looking for a different challenge, where you’ll often find yourself out in the blue...

The remote Socorro Archipelago is made up of four islands; San Benedicto, Socorro, Roca Partida and Clarion, of which the first three are possible to visit. They’re volcanic in origin, with last recorded activity at San Benedicto dating back to the 1950’s, and on the larger Socorro Island, as recently as the early 90’s.

It’s a full 24 hour voyage south to the nearest island of San Benedicto from the departure point of Cabo San Lucas at the tip of the Baja California peninsula. To get there, I travelled on the excellent Solmar V liveaboard, which has a long track record of

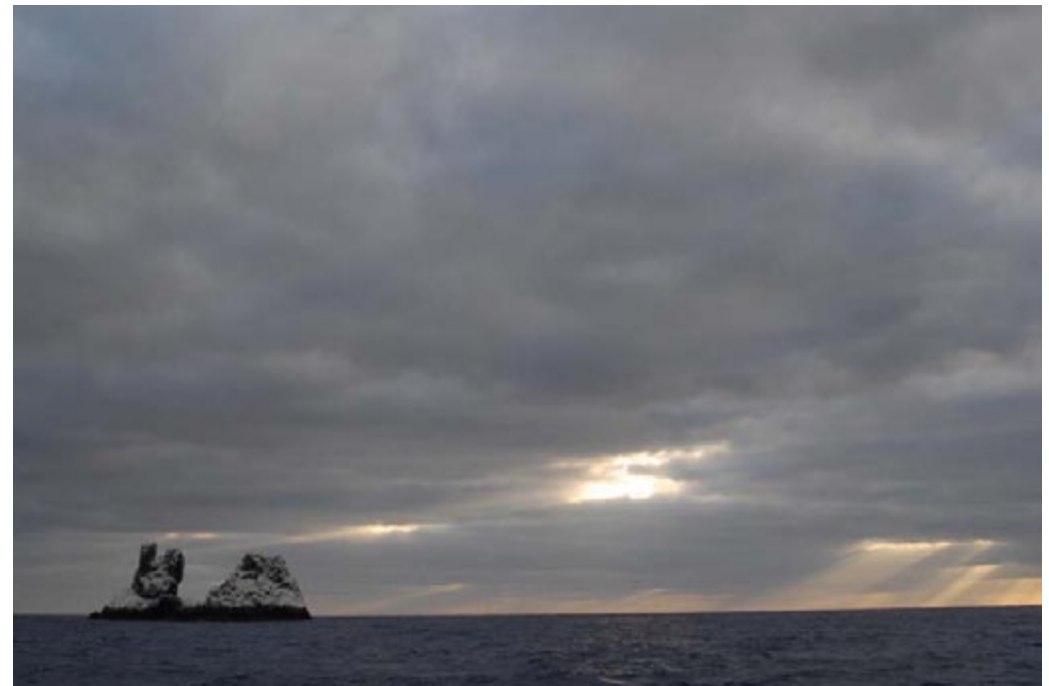
visiting the area. It’s only possible to go there during the “Socorro season” which lasts from the end of October through to the end of May.

Though the prevailing conditions dictate the exact itinerary, the general plan is to start at San Benedicto for a late afternoon “try dive” followed by a full day, then moving to Socorro Island for a day before moving off to the Roca Partida seamount for two days. After Roca Partida, it’s a return to San Benedicto for another full days diving before the long return journey north.

The Socorros are a great destination for pelagic action. Whilst nothing can be “guaranteed” in diving, you can expect some great additions to your logbook (and hopefully

Roca Partida At First Light f9 160th sec ISO 400 Nikon D200

Divers At The Spectacular Roca Partida - f8 50th sec ISO 100 Nikon D200, Subal housing, 10.5mm Fisheye





Manta Ray Close Encounter, Socorro Island f8 250th sec ISO 100 Nikon D200, Subal housing, 10.5mm Fisheye Subtronic Strobe

your portfolio) such as Giant Pacific Mantas (familiar with divers), the seldom seen Mobula Ray (related to Mantas, but smaller and with a different mouth) and a spectacular selection of sharks that include Hammerheads, White Tips, Silver Tips, Silky Sharks, Galapagos Sharks, Dusky and the possibility of Tiger Sharks and even Whale Sharks.

The area is also known for Wahoo, schools of Jacks and Tuna, Bonitos and even Marlin. Bottlenose Dolphins are common and sometimes check out divers, with whales being

represented by Humpbacks in season. Sporadic encounters are possible with other cetaceans, most often in the open ocean crossings between islands or en route to and from Cabo San Lucas.

You soon learn that the Socorro are full of photographic opportunities and challenges in equal measure, with divers tending to spend a lot of time hovering in the blue, waiting for the “big things”. But seeing is one thing, getting close enough for good photography is another, especially if you plan on using a fish eye which is



Silky Shark Wallpaper at Roca Partida f8 125th sec ISO 400 Nikon D200, Subal housing, 10.5mm Fisheye

my lens of choice.

A good example of this occurred on the very first dive at San Benedicto, when we saw a manta ray that wasn't prepared to come in close, so all we could do was watch from a distance. As the trip progressed, I found that the fish eye lens was perfect for the subjects as I enjoyed enough close encounters to justify its use, but if you find that you really can't get close enough on a consistent basis, it might be worth switching to a wide angle set up (like a 12-24mm lens) so that close proximity isn't

quite so vital.

Mantas always make great subjects and it's likely that any photographer visiting the Socorro will get some good encounters. I quickly learned the importance of anticipating the trajectory of the mantas in order to give myself the best photographic chances, although you mustn't allow it to disintegrate into chasing which is futile and counter productive, and may result in the manta departing the dive site. What you're trying to do is to place yourself in its path.



White Tip Reef Sharks At Roca Partida f8 125th sec ISO 200 Nikon D200, Subal housing, 10.5mm Fisheye Subtronic Strobe

Although it's possible to see some striking black specimens in the Socorros, the majority of the mantas I encountered were predominantly white on the underside, so there's always a concern about overexposure. As a result, I'm still working on my tendency to back off the strobe power too much. I call it "strobe conservatism". Sometimes I got it right, and other times I wasn't using enough light but at least I didn't overexpose any images.

There were opportunities to photograph the mantas from above

and below, with a couple of nice chances of hiding the sun behind the animal. I also attempted a self portrait with a manta cruising the surface in the background – I'm not really sure if I got the image I wanted, but it's given me a theme to develop further during future dive trips. It's also worth considering that mantas attract divers like moths to light so you rarely get one to yourself; the challenge is to eliminate the divers from the shot, or at least place them in aesthetically pleasing positions.

I also found that I took fewer



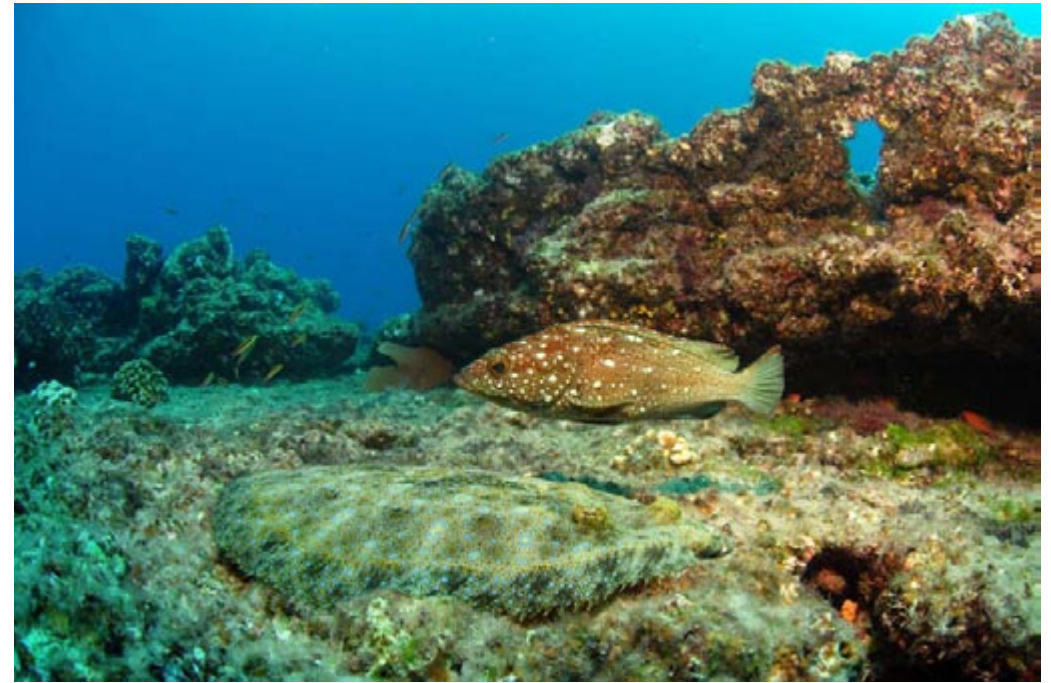
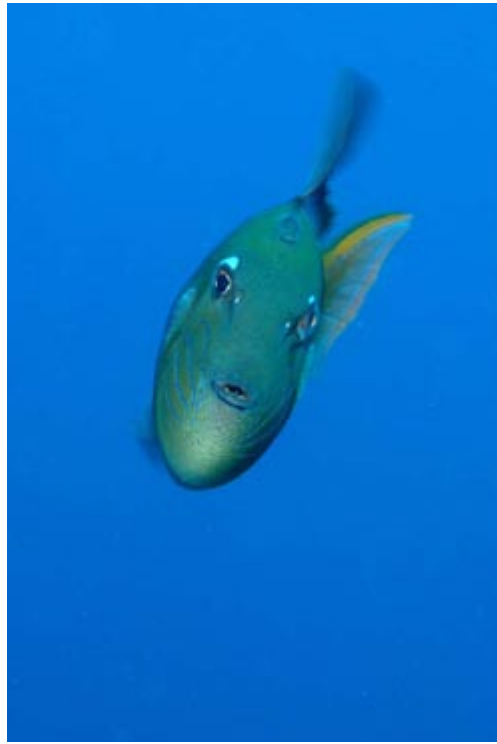
The Solmar V liveaboard is based out of Cabo San Lucas at the tip of Baja California peninsula in Mexico from October/November through to the end of May which constitutes the "Socorro season".



Ready To Dive At San Benedicto Island f16 180th sec ISO 250 Nikon D200 12-24mm Wide Angle Nikon SB800 Speedlight



Dolphin and Diver at Cabo Pearce, Socorro Island f8 60th sec ISO 200 Nikon D200 , Subal housing, 10.5mm fisheye Subtronic Strobe



Manta Ray at Cabo Pearce, Socorro Island f8 100th sec ISO 200 Nikon D200 ,Subal housing, 10.5mm Fisheye Subtronic Strobe 2

Redtailed Triggerfish, Socorro Island f16 30th sec ISO200 Nikon D200, Subal housing 60mm Macro Subtronic Strobe

Flounder & Flag Cabrilla, San Benedicto f8 100th sec ISO 100 Nikon D200, Subal housing, 10.5mm Fisheye Subtronic Strobe

pictures than I would normally do, but I had to be ready when an opportunity presented itself, as the chance may not happen again. You might only get one or two close encounters on each dive. This “ready for action” mode was put to the test at the excellent Roca Partida seamount.

On the first dive at “the rock”, as I scrambled to get my camera from the boatman (or “Pangero”) after a backwards roll into the water, Rey

blurted excitedly “Jeremy, quick get the camera, sharks!”

This dive was a real stroke of luck; we’d been dropped into the path of huge school of Silky Sharks, possibly numbering a thousand individuals. The school moved quickly, forming and reforming in a swirling vortex as divers kicked hard into the blue to get as close to the action as possible. We also noticed that a few dolphins joined the fray too.

It was an incredible sight, the classic “shark wallpaper”.

This early morning dive offered little light underwater, so it was vitally important to be ready – in this case I’d set my ISO to 400. It was overcast with the morning sun occasionally peeking through the gaps. The “wall of sharks” was encountered upon entry into the water, and upon the descent through blue water with no visual reference, so it was crucial to think quickly and intuitively about the settings, taking into consideration the brightness at the surface and the darkness below. As with any

schooling fish it was a case of trying to make sense (photographically) of what you’re seeing before the opportunity was passed. In essence, you’re looking for order amongst chaos, shapes amid randomness, and being prepared to kick hard for it in the current. In reviewing my images of the schooling sharks, I sometimes found that there were “pictures within pictures” by selective cropping.

Roca Partida is also a fantastic place to observe and photograph White Tip Reef Sharks, which can often be found snuggling together on the numerous ledges at around 15



Octopus At The Aquarium, Socorro Island f16 30th sec ISO 100 Nikon D200, Subal housing, 60mm Macro Subtronic Strobe

metres. I found that if I edged towards them slowly, they would sometimes tolerate a close approach which was a real opportunity for me. I've never managed to get good images of white tips until this trip – usually you can get “so near, but so far”.

But that isn't it around the Socorros; on other dives Scalloped Hammerheads and Galapagos Sharks plied in the deep below us, well out of range of safe diving and photography, but possible to see. I was told that on some occasions, they can sometimes be seen at shallower depths.

For fans of the macro lens,

www.uwpmag.com

there's also plenty of subject matter, though I'll confess that I only used a macro lens (my 60mm) on one dive! The dilemma is to miss the “chance” of a pelagic encounter or go for the smaller stuff. Mexican Hogfish, Flag Cabrilla (a kind of grouper), Red Tailed Triggerfish and the endemic Clarion Angelfish are good subjects, and common throughout the Socorros. Other macro subjects include lobsters, octopus, pufferfish, flounders and an incredible amount of moray eels.

For me, the style of diving was different on this trip made a refreshing change. Instead of staying

close to the reef or wall like I often do, I spent a lot of time hanging out in the blue, watching and waiting for pelagic action. The visibility was generally good although it can vary considerably, often from dive to dive, with currents changeable as well. None of the dive sites are what you would call “pretty” in a Red Sea kind of way as it's mostly rubble strewn and rocky with scattered hard corals, and similar in some respects to Hawaii. It's what swims past that makes it so worthwhile.

The Socorros are an excellent if challenging photographic destination that rewards photographers who anticipate, forward plan, and think

about the best way of capturing images given the prevailing water, light conditions and the subjects encountered. And, I suppose a little bit of luck is always a good thing too, as it is with most diving. Our trip was considered to be one of the best of the season, where we were offered a glimpse into a bygone era, of seas teeming with life in all its brutal beauty. It must be said, there's some great opportunities here, fellow photographers!

Jeremy Cuff

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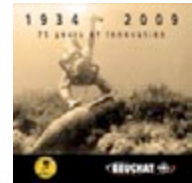
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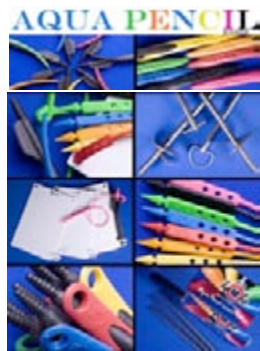
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Diving Gunung Api

Volcano Of The Sea Snakes

by Chris Mitchell

In a remote part of Indonesia's Banda Sea lies the still active volcano Gunung Api, or "Fire Mountain" - and below its lava-encrusted shoreline the volcano is home to hundreds of highly venomous sea snakes that hunt in packs and show little fear of human scuba divers.

Deep within Indonesia's 17,000 islands lies Gunung Api, one of the remotest volcanic atolls within the Banda Sea. One hundred and twenty miles away from the nearest landmass, getting there takes several days of solid cruising from a scuba diving liveaboard boat departing from the Banda Islands. (I've included Gunung Api's location on a Google Map below if you're interested in seeing exactly where it is). For our trip we were on the MSY Seahorse with whom I'd previously explored Raja Ampat. There are only a few months in each year where the Banda Sea is calm enough to be safely crossed. And the reason for all this effort is because below the water the slopes of "Fire Mountain" are home to hundreds, possibly thousands of venomous sea

snakes that we were going to go scuba diving with.

Given that the banded and olive sea snake species which are found at Gunung Api are poisonous, you may wonder why anyone would willingly want to get in the water with them, especially as the snakes seen here are often a metre or more in length and several centimetres in circumference. The answer is that they are incredibly graceful creatures to watch move through the water, quite beautiful in the fluidity of their motion as they cruise hunting across the reef or head for the surface periodically to breathe before sidwinding back down again to the reef. While sea snakes are poisonous, they are also non-aggressive - although they are very, very curious about scuba divers, as the photos show. They have no fear about coming very close to investigate.

What is also fascinating about the sea snakes at Gunung Api is that they frequently move in packs together, whereas elsewhere they prefer to operate individually. They have also been seen infiltrating



Gunung Api, or "Fire Mountain" is a still active volcano

*Nikon D70s, 60mm lens in an Ikelite housing with a single Ikelite DS125 strobe.
Manual exposure 1/320th @ F6.3 ISO 200*





Nikon D70s, 12-24mm lens in an Ikelite housing with a single Ikelite DS125 strobe. Manual exposure 1/160th @ F7.1 ISO 200



MSY Seahorse

shoals of fish and hunting with them, although I didn't get to witness this behaviour this time round.

This sea snake group hunting behaviour was completely new to me. The first time I encountered it, I was slightly apart from my group, floating around in 10 metres and scanning the blue around me hoping to get a photo of one of the snakes with a backdrop of the ocean behind it. Several minutes went by and there was not a hint of a snake anywhere to be seen. I was getting a bit bored. I idly looked down to check my camera

- and the next thing I knew, there was not one but three sea snakes, each over a metre long, their bodies trailing around me, all staring into the dome of the camera's housing, as if mesmerised by their own reflections. Did I have the presence of mind to take a photo? No - I did exactly what all my training as a professional scuba diver told me to do and, erm, ran away. Despite knowing they wouldn't bite, being surrounded by three sea snakes that were extremely close was too much to deal with. I backed off, keeping an eye on them - and

they followed me! It took a couple of minutes before they lost interest. However, suitably chastened, I headed back to the reef and now knowing just quite how it felt to be mobbed by snakes, I managed to hold my nerve a bit better when I saw the clusters of snakes pictured below.

These images are not really the best, for the simple reason the snakes move so fast - it's really hard work trying to capture them in a split second because they are continually moving and writhing - it's amazing to watch, and I wish I'd had a video

camera because to film these creatures in motion is the only real way to capture their grace.

Sea snakes need to periodically head to the surface in order to breathe, and we would often see them heading up and coming back down again, as well as resting on the surface. On my very last dive on Gunung Api, two snakes followed me from 5 metres until I surfaced myself - when I ducked my head back under the water, they were still circling around my fins. I had to gently wave my fins at them to make them back off



*Nikon D70s, 60mm lens in an Ikelite housing with a single Ikelite DS125 strobe.
Manual exposure 1/320th @ F6.3 ISO 200*

before I got onto the boat for fear I might inadvertently whack them otherwise. I wish I'd got a photo of that moment too. It was an amazing end to a fantastic day at Gunung Api - I only wished we could have stayed longer, but given its remote and utterly exposed location, the boat captain wanted to make sail before the bad weather that had been following us across the Banda Sea caught up with us. Thanks to MSY Seahorse for letting me go on this amazing trip to Gunung Api, and I'm looking forward

to going back on MSY Damai (www.dive-damai.com) in November - and next time, I'm taking a video camera.

Chris Mitchell
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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.

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Whale Sharks and Isla Mujeres

by Glenn Lawyer

Twenty five miles out to sea from Isla Mujeres (Yucatan, Mexico), the sea floor rises in a large bell-like hill whose top is at a relatively shallow 35 meters. And here, my friend, here awaits mystery and wonder. The hill is hollow. A cathedral lies hidden under the sea. Down the side of the hill, below 40 meters, you will find the main entrance fringed with sea fans.

A black-tip shark shoots out the far side as I approach. The usher, a bright yellow toadfish, watches all who enter and leave from his seat under a rock. The bishop is a bull shark. Small black coral bushes cover the floor. The ceiling rises several meters above me. Down to the left lies a side entrance. The cavern is light enough that I can just barely dispense with my torch. When I leave, my prayers complete, a school of angelfish follow. Notre Dame doesn't offer such spendor!

Two large groupers lurk at the top of the bell. I approach for a picture, but they are wary. Coming up the line I am joined by Kevin, Tanda, and Enrique. And five full-grown great barracuda.

The site is called "The Hills." Enrique was given the GPS location from a fisherman acquaintance. He had dived it three times previously. This was the 4th dive ever made at this location.

Normally divers in the Cancun region go to Cozumel. I had instead gone to Isla Mujeres, for



The fisherman's cooperative meeting hall.

two reasons. First, whale sharks. Second, all the divers go to Cozumel. On the island I discovered a third reason: Enrique's Unique Dives (www.divingislamujeres.com).

I knew on the first day that these dives would indeed be unique. A squall intercepted us on the way to No-Name Reef. The rain was thick enough to swim in. But it passed quickly, and when it passed, it blessed us with a horizon to horizon double rainbow. Rainbow dives are always special. On this one I discovered a dive guide with the same pioneering spirit as Guy Gilpatric or Hans Hass.

Enrique has been diving these waters since he was nine and working as a guide since age fourteen. After the recent breakup of Coral Divers he set up his own operation. He runs beginner courses in the afternoon, baptising new converts in the shallow waters of Manchones reef. But that is just for money, to keep the operation going. What Enrique wants to do is explore. Morning trips go to places where few other go, or where no-one has gone before.



Preparing for the whale shark festival.

Enrique relaxing at home f/13.0 (1/160) Tokina 10-17mm Manual exposure; ISO 200; Canon 20; Aquatica A20; dual Inon z240



The trips I made with Enrique had only two other passengers, Kevin and Tanda. They usually had their own dive agenda. I was free to explore on my own. This is how I love to dive, without the pressure or expectations of a group. Enrique joined half the dives. Otherwise he stayed topside watching our bubbles.

One cannot go to undiscovered sites every day, of course. Enrique also took us to outlying and rarely dived locations. Iglecias, for example, a collection of limestone outcrops permeated by

caves and arches, covered in luxuriant coral and purple sea fans. I found a beautiful swim-through, perhaps 8 meters from entrance to exit. The bottom was covered in seaweed swaying slowly with the surge. Coming out the other side, I saw Kevin and Tanda for the first time since we had entered the water. They waved and continued on their way.

My first reason for coming to Isla Mujeres was whale sharks. Summer is shark season. A blanket of plankton turns the water between 5 and 15 meters into a pea-green soup. This feast draws the sharks. Generally whale sharks are solitary creatures, but not here, not in summer. Between June and September, a school of 1-200 gathers. About two years ago, thanks in part to Enrique, this school was discovered by the tour operators. Now, instead of three boats circling one shark it is hundreds of sharks circling a few boats. The whale shark tours today put you in the middle of a giant, if gentle, feeding frenzy. To celebrate this discovery, and to preserve the sharks, the island has launched an annual whale shark festival (www.whalesharkfest.com).

Enrique suggested I take his brother-in-law's boat to snorkel with the whale sharks. Two German tourists rounded out the passenger list. With only three passengers in the boat, I had one and a half hours in the



Anglefish. f/10.0 (1/160) Tokina 10-17mm Manual exposure; ISO 200; Canon 20; Aquatica A20; dual Inon z240 strobes.

water. Whale sharks were everywhere. They swam past two, three at a time, coming from every direction. A pair of sharks swam past. The boat crew started shouting madly. I spun and saw a massive maw turn away at the last minute. I wanted a shot shooting with the sun (magic-filter style). I soon spotted a shark approaching from the right direction, but not the one swimming up behind me. Not until I glanced down, startled by the giant beast between my legs.

My Tokina 10-17mm was dialed to lucky 13 with the camera set to shutter-speed priority. A speed of 200 proved too slow. Bumping up to 250, I was able to capture sunbeams and sharks. Had I been thinking, I would have also tried 360. And auto-focus, instead of “star-button” focus



f/8.0 (1/200) Tokina 10-17mm Shutter-speed priority; ISO 200; Canon 20; Aquatica A20.





(too young).

Our favorite afternoon expedition was to the turtle farm (Tortugranja). Here they hatch sea turtle eggs in safety. Yearlings are released back into the wild.

The Cancun/Isla Mujeres ferry dock is about 1/2 hour from the airport. We arranged transfers via USA Transfers (www.usa-transfers.com/). We were very happy with the service and price. My wife had requested that the driver took us past a grocery store on the mainland on our way to the ferry. This proved a good idea, since the store on the island is limited. Once on the island, the taxi to the hotel was \$3.

Post-processing of the images was done using the beta version of Bibblepro 5 (www.bibblelabs.com). Bibble Labs, in addition to providing blazingly fast professional workflow software, strongly support open standards such as OpenRaw. I've been a fan for years.

Young sea turtles at the Tortugranja. f/4.0 (1/250) Canon 17-85mm Shutter-speed exposure; ISO 800; Canon 20d.

(I shoot a Canon 20D). Still, for shots of approaching sharks, of passing sharks, of sharks beneath me, and of sharks beside me, this formula worked reasonably well. It failed on silhouettes against the sun as sharks swam above me. A manual, pre-set exposure (and better focus) might have allowed some of these to work out.

Enrique's shop is minimal. It consists of a booth on the street side of a beachfront restaurant and a boat on the water side. The restaurant is not open in the morning, leaving plenty of table space to set up gear. Space on the boat is more limited. The boat typically departed at 8.30, and we returned shortly after noon. Fantastic diving in the morning, relaxed island afternoons and evenings with my lovely (non-diving) wife and children

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Glenn Lawyer



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The Appeal of Spring Time

by Mark Webster

My workshop clients often question the value of temperate or cold water diving, and indeed my sanity, when I extol its virtues. If you have been trained in warm tropical conditions then it may be difficult to imagine the attractions of cold and sometimes murky water diving, but the most likely misconception is that there is nothing to see or photograph. The issue of water temperature can be easily dealt with by using the correct equipment and a dry suit with a good thermal under suit is a must for photography. Suits and equipment feel bulkier and heavier than tropical equipment, but a little practise will soon familiarise you with the techniques required for comfortable diving. As for marine life subjects temperate waters can be every bit as rich and varied as tropical seas, but of course we need to be able to adapt our techniques to suit the (sometimes less than perfect) conditions. There is no shortage of subjects and these can vary during the year more than the tropics dependant on the prevailing season.

Spring normally comes early in the south west of the UK as winters

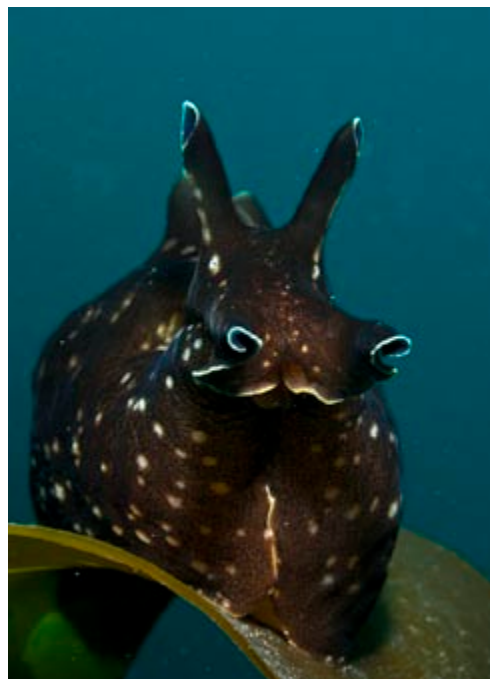
are generally mild, but this year saw one of the coldest winters for some time including several snow falls which is a rare event. Consequently, the breeding process in particular has been a little slower and we have had to wait until April and May for some real activity. It is often the smallest things which first catch your attention and a good example of this are the little rosettes and spiral trails of eggs which appear over the reef which indicate that the nudibranchs and sea hares have begun to breed. You will find some of the perpetrators on the reef itself, particularly the sea lemons which come in a variety of colour combinations from yellow and pink to brown and green or pure white to

(Right) Finding a sea hare grazing on a kelp frond gives the opportunity to shoot the subject with a natural light background. Nikon D300, Subal ND20, 60mm micro, Inon Quad Flash, ISO100 f16 1/20.

(Far right) A mass of sea hare eggs in various colours which are derived from the food source during mating. Nikon D200, Subal ND20, 105mm micro, Inon Quad Flash, ISO100 f16 1/60.



Pendennis Point in Falmouth offers some easy and challenging entry points to some excellent beach diving. Nikon D200, 18-200mm zoom, ISO100, programme mode.





Male Tompot blennies will be found guarding their egg masses but are still approachable for a close up image despite this. Nikon D300, Subal ND20, 60mm micro, Inon Quad Flash, ISO100 f16 1/60.

match the colours of the sponges they feed on. For other species you should look closely at the kelp, sea lettuces, bryozoans and hydroids where you will often find various exotic looking examples in the process of mating or laying their eggs. In fact it is often the egg mass which you will spot first and only close inspection through the macro lens will reveal the well camouflaged nudibranch culprit.

This Spring the nudibranch activity has been joined by an explosion of sea hares (*Aplysiomorpha*). Most years we will find sea hares in the shallows for a few weeks, but every three or four years the population increases exponentially and you can barely move without seeing them in pairs or a mass orgy of copulation and egg laying. The sea hares can make attractive photographic subjects as they come in various hues and patterns (their colour changes dependant on the food source) and you can vary your technique to capture portraits, close ups and the breeding activity. They



Polycera quadrilineata laying eggs on a kelp frond after mating. Nikon D100, Light and Motion Titan housing, 105mm micro, Inon wet lens, Inon Quad Flash, ISO200 f16 1/20.

are most often found on the seaweeds that abound on the sea bed in springtime, but it is also worth checking out the kelp fronds on the reef as well. Where the subject is elevated on the kelp it may offer an opportunity to introduce some natural light behind the subject. This year the sea hares have varied in size from 60mm (2.5") to a quite large 120mm (5") although some years you might see the sub tropical species (*Aplysia depilans*) that can be 300mm (12") or more. A 60mm macro lens on DX or FX format is a good choice, whilst a wide angle lens can be used on the larger species.

Nudibranchs provide the most variety in both colouring and appearance. There are two major groups to watch out for; the Dorids, or sponge eaters, and the Aeolids which feed mostly on hydroids and bryozoans. The feature which is common to both of them is that their gills are external and located on their backs.

The most common of the Dorids is the 'sea



Coryphella browni preparing to mate on a kelp frond. Nikon D300, Subal ND20, 10-17mm zoom, 2X teleconverter, Subtronic Mini flash guns, ISO100 f14 1/20.

lemon', so called due to its often vivid yellow colouring and knobby texture which it has adopted to resemble its main food source, the common yellow sponge. Sea lemons do in fact come in a variety of colours and textures, from smooth grey to orange and purple, dependant on which species of sponge they feed upon (there are over 250 known species of sponge in the English Channel alone!), but they all rely on their camouflage as their first defence against predators. Size of this species varies enormously from a few millimetres to 12 centimetres (1/4" to 4") and all have a wide flat shape developed to firmly grip their sponge habitat.

The Aeolids adopt a different defensive strategy and aim to be seen as clearly as possible by their predators. They come in a quite staggering array of shapes and colours which advertise the fact that they are poisonous (some excrete sulphuric acid), sting or just taste unpleasant! This group feeds on bryozoans and hydroids especially,



Corkwing wrasse are busy building nests in April and May. Watch patiently to see where the nest is and then wait for the fish to return with materials and capture a close up. Nikon D300, Subal ND20, 60mm micro, Inon Quad Flash, ISO100 f11 1/60.

which have their own stinging cell system. The nudibranch is able to ingest these and then store them in the tips of their cerata (the filaments on their backs) which they shed and regenerate if they are attacked. Some species are also able to graze upon the stinging cells of anemones to for the same purpose. These species are quite small normally, perhaps 10-25mm (1/3" to 1") so a 105mm macro lens with a wet or dry dioptre is the perfect tool to capture them.

Most nudibranchs, and sea hares, are hermaphrodite (both male and female at the same time) and breeding may vary from every month to once every twelve months. However, April and May appear to be very active months in the British Isles when the rocks will be peppered with the egg "rosettes" of nudibranchs which are normally pigmented with the dominant colour of the parent. When the young larva hatch they float to the surface



Shannies, closely related to the Tompot blenny, are found in shallow water and rock pools and will pose for the camera if you are patient. Nikon D300, Subal ND20, 60mm micro, Inon Quad Flash, ISO100 f16 1/60.

to drift with the current during which time they reabsorb a small spiral shell that they start life with. After a few days they sink back to the seabed where their life cycle may only be as much as twelve months.

The fish are beginning to get frisky as well and this is often a good time to observe fish behaviour at close quarters when their minds are on other more natural activities. The male corkwing wrasse are not the boldest of reef residents, but now they may allow a closer approach as they are engrossed in nest building. You will normally spot them scavenging at the edge of the reef for bits of loose weed and other debris which they will pick up in their mouths and then transport to the nest site. Having found this you can then hover for a little while watching this determined toil and being largely ignored by the fish.

Other male species will be busy guarding



Black faced blenny's are frequently found under overhanging sections of reef and are both inquisitive and bold enough for a close up shot. Nikon D300, Subal ND20, 60mm micro, Inon Quad Flash, ISO100 f16 1/60.

their fertilised eggs from predators until they hatch. These include the ever appealing Tompot blenny and perhaps the ugliest fish in UK waters, the Lump sucker. The shanny, or common blenny, is normally shy and quite difficult to spot with his excellent camouflage, but during breeding his colour darkens to grey or black whilst the lips go white and he becomes more bold with his parental duties. The fact that these subjects stay in one place for days or weeks means that you can re-visit them and improve your images or try different techniques and lens combinations.

You may be lucky enough to spot one or two unusual species dependant on the water temperature. One of these is the Black-faced blenny (*Tripterygion delaisi*) which is normally found much further south in the Atlantic and is common in the Mediterranean. The name comes from the male's splendid breeding livery of bright yellow



Squid come inshore to lay their eggs during the night and the following day you may find a section of reef or wreckage in this case festooned with their egg cases. Nikon D300, Subal ND20, 10-17mm zoom, Subtronic Mini flash guns, ISO100 f11 1/30.

or orange and a very dark or black face. We seem to see the female more frequently which is a very attractive fish but is often hard to spot as they like to skip around on overhanging reef faces and blend quite well with the seaweeds, sponges and bryozoans. You often spot these fish simply through their movement initially, but they are quite bold and seem inquisitive when a focus light finds them. Again, a 60mm lens is perfect for all these blenny species.

Hidden amongst the kelp, weeds and sea grass you may find little clusters of dark 'sea grapes' or a clutch of white lozenge shaped egg sacks. These are evidence that both cuttle fish and squid are in the area mating. If you look carefully on the gravel bottom you will more than likely find some well camouflaged cuttle fish who will put on a fine display of pattern, colour and camouflage changes



Swimming crabs and velvet swimming crabs are often found in mating pairs with the male protecting the female in preparation for the duration of the mating period. Nikon D100, Light and Motion Titan housing, 105mm micro, Inon Quad Flash, ISO200 f11 1/60.

if approached gently. Squid are occasionally seen during the day, but if you want a better chance of seeing them you need to return after dark and wait patiently with a powerful torch which may attracts a few fleeting visits.

Searching through the kelp stypes may also reveal several different species of starfish beginning their spawning behaviour at this time of year. Often the spiny starfish can be found climbing the kelp stypes to release its spawn into the water column to be carried away on the current. Others, like the brightly hued 'blood henry' will lay their brood directly onto the reef by raising its body up and seeming to stand on tip toe.

Back on the reef, investigating the various cracks and fissures you will find various species of crabs also preparing to mate. Male swimming crabs and cancer crabs clutch the recently moulted



Cuttle fish are another species that come into the shallows to mate and lay their eggs. Nikon D300, Subal ND20, 10-17mm zoom, Subtronic Mini flash guns, ISO100 f11 1/30.

Topknot flatfish are often missed due to their excellent camouflage but are normally convinced you cannot see them. Nikon D300, Subal ND20, 105mm micro, Inon Quad Flash, ISO100 f16 1/60.





The biggest fish you may encounter in late spring is of course the basking shark. Even though they may appear in large numbers they do require some planning and patience to capture an image. Nikon D200, Subal ND20, 12-24mm zoom, ISO200 f11 1/60.

females to their chests to protect her whilst waiting until she is ready to mate. Following which she will carry her brood with her until they hatch. Spider crabs come inshore to breed as well and you may encounter small congregations of them waiting for the females to moult when the competition between the males for partners will begin.

The first mild sunny days of spring soon propagate the first phytoplankton or algae bloom which can quickly reduce visibility and turn the waters dark green both inshore and offshore. However, as usual nature has all this planned and this bloom is

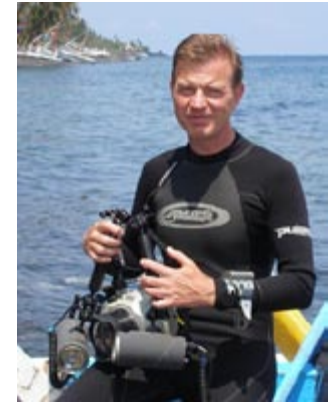
timed to coincide with the hatching of the millions of larvae from the various spawnings. These will feed on the algae as they develop and in turn create their own plankton bloom which will be fed on by others further up the food chain. At the end of this food chain is of course our largest fish species, the basking shark, which will appear in May or June and will provide some electric encounters for those patient enough to stalk them and forsake their diving kit for a snorkel.

You may have to look harder for some of the smaller subjects on temperate reefs but the capture of images is just as satisfying

and exciting as it tropical waters, particularly if you produce a good image in challenging conditions. Beach diving means that you can take your time and stay shallow, where the best available light prevails, and make solo dives if that appeals to you. Search your target area for rocky foreshores that allow an easy entry with a camera, but remember to time your dives to suit the height of the tide. I have one or two excellent dive sites that are only accessible one hour each side of high water, when the water falls too low you are stranded or have a long swim back to the beach! Make sure you can stay warm and

dry with the correct equipment and choose a lens to suit your subject and then take the plunge into those chilly waters!

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Review: MarineLife Keywords

by Alex Mustard

Keywords are the way that searches find our images. This can be the search engine within our own image catalogue, Google on the internet or the search facility in a stock photo agency. They all work with the same keywords, which are stored in the image metadata in a format that has been standardised since the early 1990s by the IPTC (International Press Telecommunications Council). It is a system that works well.

The only real downside is that there are few more laborious and mind-numbing tasks in underwater photography than typing in a series of keywords for a picture. Some metadata, like our camera settings are generated automatically by our camera, but keywords must be typed in manually. It may only take a minute for an individual shot, but it soon adds up. The most taxing keywords to do are the species names, which have to be checked letter by letter as we type them in and are probably the most important keyword of all.

Anybody who has ever keyworded images will be thrilled to hear that help is at hand courtesy

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of a new product MarineLife Keyword List (MLKL), developed by underwater photographers Marty Snyderman, Barry Guimbello and Eric Cheng. It costs \$99 USD and is available as a download from their website:

www.marinekeywords.com

MLKL is simply a list of common and species names for over 12,000 commonly photographed marine species that imports into our existing photo management software without adversely affecting the current keyword database. The names are there, ready and waiting, and we only have to type the first few letters to find them. It saves a huge amount of typing species names and just an important checking their spelling. And even better the system makes it easy to add a more complete taxonomic listing. These, for example, are the keywords that were generated for an oceanic whitetip shark, all at the click of a mouse: Marine Life, Fishes, Cartilaginous Fishes: Chondrichthyes, Ground Sharks: Carcharhiniformes, Requiem Sharks: Carcharhinae, oceanic whitetip shark: *Carcharhinus longimanus*.



A pair of mimic octopuses mating. The MarineLife Keyword List generated the following keyword list for this species: Marine Life, Invertebrates, Mollusks: Mollusca, Cephalopods: Cephalopoda, Octopus: Octopoda, mimic octopus: Thaumoctopus mimicus. Nikon D700 + Nikon 60mm AFS. Subal housing. 2x Inon Z240 strobes. ISO 200.

Importantly this product is designed to plug straight into digital workflow software, such as Adobe's Lightroom and Apple's Aperture. Adding keywords directly at the RAW file stage means that the keywords remain part of the metadata and are carried on through all versions of the image. The software does not help you identify creatures, but with many subjects our gap in the knowledge is between the common name and

the scientific name or in the correct spelling of that latin. MLKL is perfect in this regard. It is also an ideal tool in the field, where there is often a local expert to whiz you through the IDs.

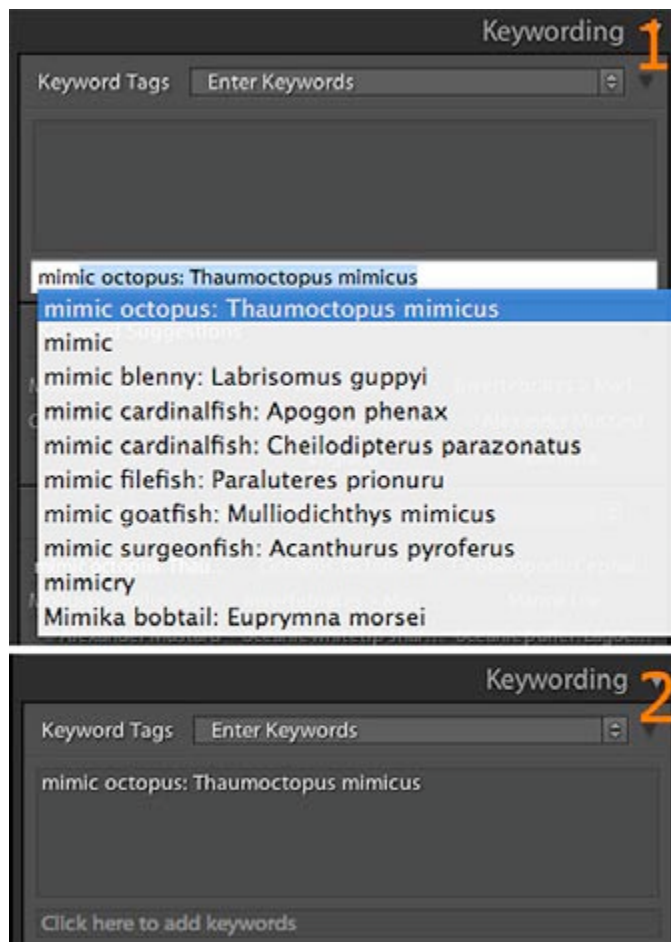
I have been using the software on Lightroom and it is perhaps easiest to demonstrate how it works with an example of my own workflow. When I initially import images into Lightroom, usually after a dive, I will add generic keywords for all

the images. These are usually location based, e.g. Red Sea, Egypt, Sinai, Ras Mohammed, but could include more generic keywords like ocean, underwater etc.

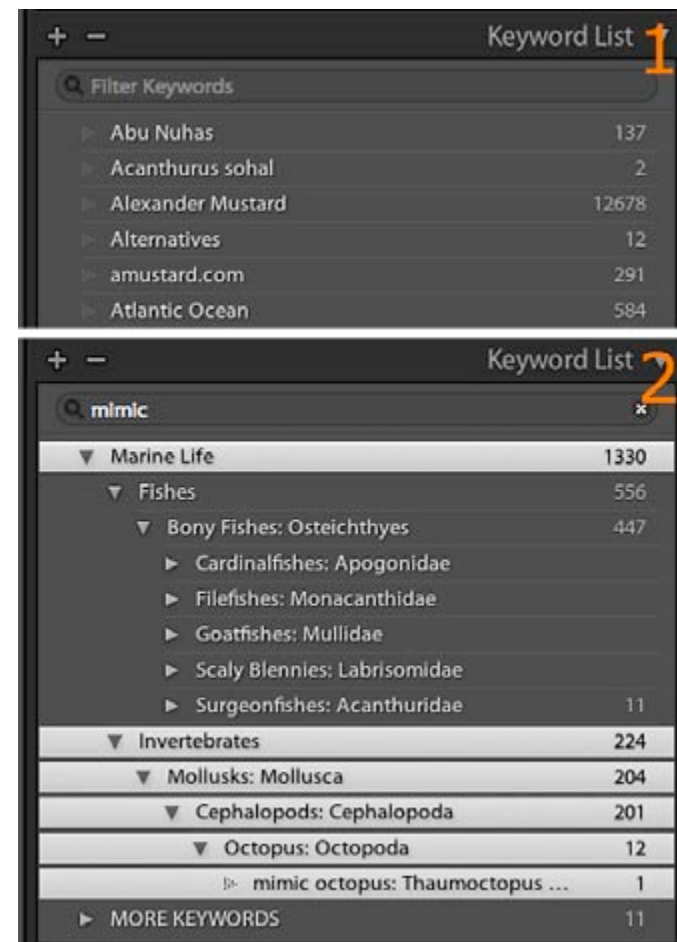
Once the images are imported, there are two main ways to add the marine life keywords in the Library mode of Lightroom. The quickest is under the Keywording menu on the right of the screen. In this menu there is a box labeled “Click here to add keywords”. When we click and type in the box it prompts the rest of the name. For example type “oceanic” and we get options of oceanic whitetip shark, oceanic triggerfish and oceanic pufferfish, all complete with their latin names. Just the letters “oc” will get you a list of 15 or so, which makes it even quicker. Select the one you want and press return and its added.

The matching under the Keywording menu in Lightroom is based on the first few letters, and since names are listed as “common name: Latin name” this method can only be used to find species by common names. This is fine most of the time, but common names can vary. A well-know photo of mine is of a bohar snapper (*Lutjanus bohar*) in the Red Sea. This species is not listed under bohar snapper, nor two spot snapper (the name used by Fishbase), nor the Australian name red bass, but on MLKL as red snapper. Most species are not so troublesome, but it does make the point that searching this way can cause problems.

I prefer to use the Keyword List menu, again on the right of the screen in the Library mode of Lightroom, instead. When we click and then type into the box labeled “Filter Keywords”, Lightroom searches for matches anywhere in the entry, so we can search with the whole or parts of either the common name or scientific name. This method,



The Keywording menu in Lightroom is the quickest way to prompt a species keyword entry. It works on the first few letters of the common name. Just click on the “Click here to add keywords” box and begin typing. Here (1) I typed “mim” and had a choice of species, I selected “mimic octopus” and clicked return and this was added to the keywords in (2).



The Keyword List menu is a slower way to add keywords, but allows searches to be made with any part of the species name and also makes it easy to add other taxonomic levels to the keyword list. I typed “mimic” (although it would have also worked had I typed “Thaumoctopus”) and then manually selected the levels in the classification that I wished to add to the keywords. Then I have to drag these over to the image or images and they are added.



is slightly slower, but also reveals the entire classification entry for the species, enabling us to add multiple taxonomic levels to the keyword list. Just click on the levels we want and drag them to the picture. The species entries in the MLKL have been listed under these taxonomic divisions, so this all comes up automatically when we search for a species. Also helpfully, the various levels remain selected when we click back across to the images, allowing us to select all the images in that folder with this species and then add the keywords to them all at once. The time saving is tremendous.

The list includes the genus and species of 12,000 species, including over 4000 fish, 4000 invertebrates, and all known marine turtles, rays, skates, sharks, marine reptiles and marine mammals. Of course, there are far more species in the oceans than this and like a red rag to a bull the first thing I did was to try and find any absentees. It is not easy. The coverage is fantastic in the Indo Pacific and Caribbean, I tested it on a recent Lembeh portfolio and MLKL covered everything that was identifiable! Impressed I then tested it at the other end of the scale, on images from a trip to Vancouver Island and again found all names I checked.

This summer, however, much of my diving has been closer to

home and here I found a few gaps in the database. The list struggles with fish from around the UK coast, in Scandinavia and also in the Mediterranean. Curiously, invertebrates are usually covered. I also found many of the common, but endemic fish of the Red Sea were absent. I guess that this reflects the typical diving of the creators; all of whom are US based underwater photographers. Although the product is sold as a stand-alone with no guarantee of upgrades, I would not be surprised if an updated version appears in the future, plugging these small gaps.

My only other small gripe is that the level of phylogenetic detail is not consistent between species. For example identify a nudibranch and you get a long series of taxonomic levels: Marine Life, Invertebrates, Mollusks: Mollusca, Gastropods: Gastropoda, Opisthobranchs: Ophisthobranchia, Nudibranchs: Nudibranchia, Sea Slugs, Dorids: Doridina: Doridacea, Chromodorididae, Chromodoris magnifica, whereas identifying a fish gives a more concise result: Marine Life, Fishes Bony Fishes: Osteichthyes, Angelfishes: Pomacanthidae, flame angelfish: Centropyge loricula. Although it can be argued that how many image searches will really use the word

Perciformes!

That said, MLKL is easily modified and the user can easily add additional species or more detailed taxonomic divisions, should they wish. I have added many of the common UK species to my database and may add a little bit more detail to fish phylogeny in the future.

We're often told that one of the great advantages of the digital photography age is that film is free and we can take as many pictures as we'd like. But it doesn't take long for hard drives to be bulging with 1000s of shots and finding the one you want, several years after you took it, can be a pain even in a well organised filing system. Keywords are the way we make sense of this chaos. Furthermore, keywording is an essential part of workflow for anyone who supplies their images to photo stock libraries. MLKL was built for these tasks and having tasted it I could never give it up.

It is often said that time is money. I can't think of many other products, designed for underwater photographers, which will save you as much time for so little money. A highly recommended purchase.

Alex Mustard
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Although there are many times more than 12000 species in the sea it is quite a challenge to find species that are not included. The main gap I have found in the list is in European Seas, unsurprising given the North American origin of the product. But it is easy to add entries yourself and even place them in the correct place in the list, so that the whole classification comes up. I added this tompot blenny to the list, filing it under Combtooth blennies. Its listing now comes up as: Marine Life, Fishes, Bony Fishes: Osteichthyes, Combtooth Blennies: Blenniidae, tompot blenny: Parablennius gattorugine.

36^e FESTIVAL MONDIAL

DE L'IMAGE SOUS-MARINE

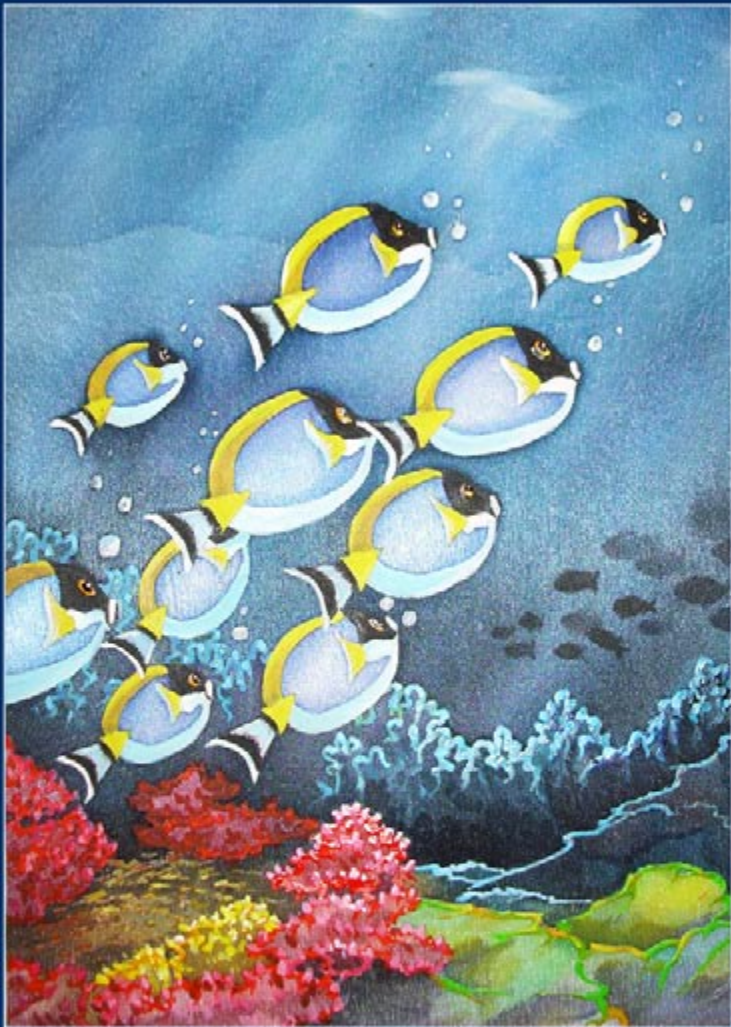


Photo: LUDOVIC, T. Im. Scapini, R. G. 2009

**PALAIS DU PHARO
MARSEILLE**
29 octobre - 1^{er} novembre 2009



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

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

Uw photo techniques - Balanced light, composition, etc

Locations - Photo friendly dive sites, countries or liveboards

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 1

On a recent dive off the Plymouth Breakwater in Devon, here in the UK, my plan was to do some quick tests to establish which colour filter would best counteract the effect of a Magic Filter. The idea being that I could give my model a torch with the correct filter on and the light output would look the right colour rather than the normal deep magenta. I took down 4 different strengths and you can see the other three under a stone at the bottom of the photo.

The test shots wouldn't take long and after that I planned to go looking for some scallops for my supper. It's a good site for catching a few scallops - there aren't stacks of them but they are usually a good size and very tasty indeed.

During my test shots a diver from another nearby boat swam past and I took very little notice and carried on with my test shots.

With my test shots complete I pulled my goodie bag out of my leg pocket and went looking for supper. I spent the next 20 minutes scouring the seabed for scallops but only found one in the whole of that time which was very unusual. Now I have a rule



Nikon D700, Subal, 16mm F2.8 @ F8, 1/30th sec, Manual exposure, ISO 800 GreenWater Magic filter

that if I don't find 2 scallops I put the first one back so I returned to the boat emptyhanded.

When I got home I downloaded my pictures onto my computer and when I saw this shot enlarged on my

monitor I saw the reason why I had only found one scallop. The diver in the background is carrying a goodie bag full of scallops!

Peter Rowlands
www.magic-filters.com

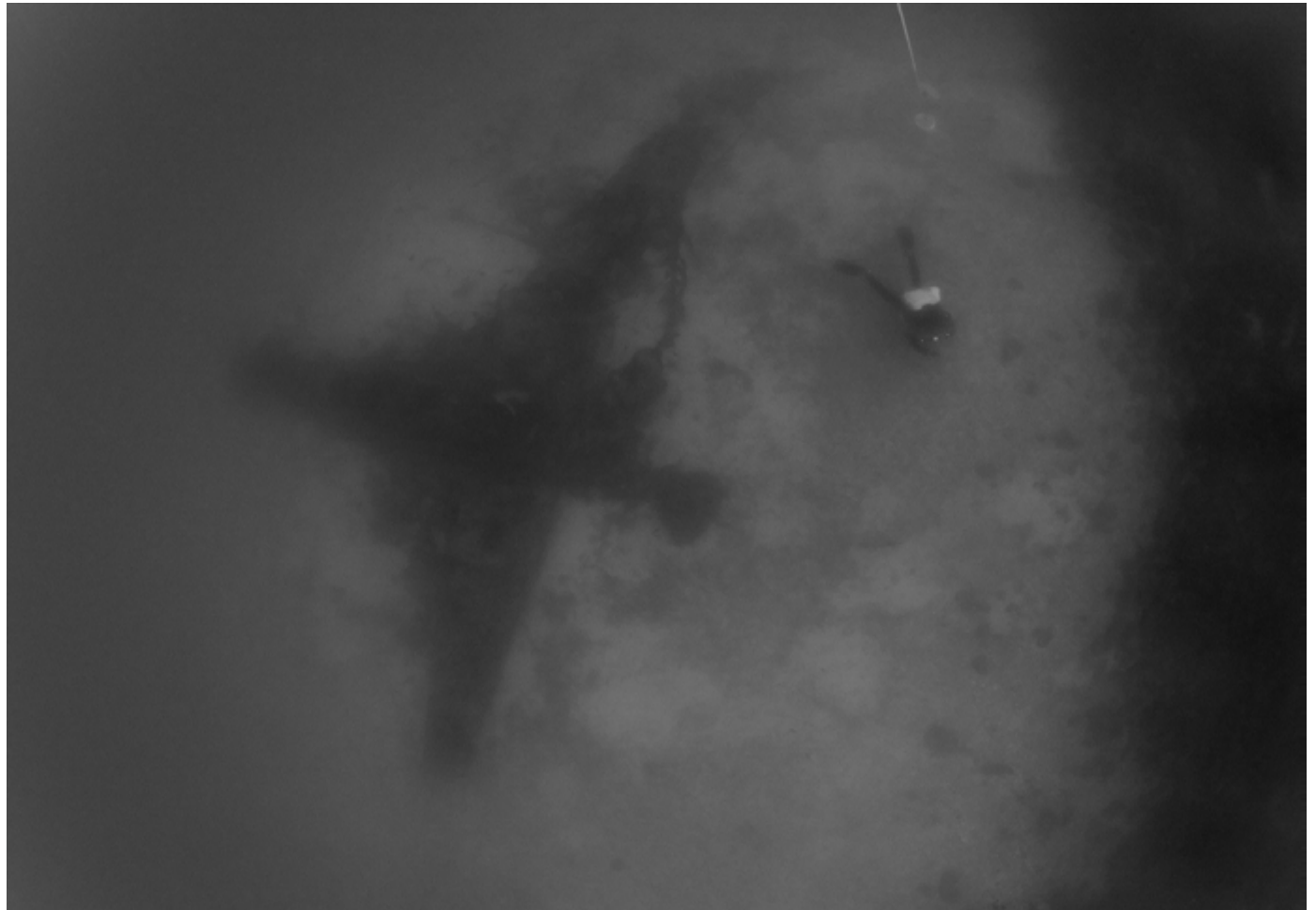
Parting Shots 2

Over the years the story circulated throughout the local dive community but its whereabouts were not generally known. Every once in awhile you'd hear about ol' "Charlie-you-know," who supposedly had the rear gunner's machine gun sitting in his garage. Eventually a small number of folks learned of the exact location but pretty much kept it to themselves. Now, a couple of commercial charter vessels will take select small groups to the site.

The wreckage is pretty much just that, wreckage. The Avenger is badly deteriorated and quite fragile. Little remains of a recognizable airplane. The forward engine area and most of the cockpit has been torn away with only scraps of metal lying about. The wings are laying flat on the sand and have become a refuge for an abundance of marine life. More fish than you'd think possible call the place home.

It doesn't take long to make a circumnavigation of the site. She lies near a non-descript rocky shelf pointing toward the island. Even a WWII history buff would have a hard time spending more than about 20 minutes checking out the 65 year old scrap metal heap. Since I've been to many ship and aircraft final resting places around the world, this at first seemed like just an amusing local morning dive.

Our first visit to the torpedo bomber was blessed with much better than average visibility and the sun was shining brightly. By the time our sojourn was over the sun ball had cleared Anacapa and climbed higher in the sky flooding us with muted light. On my way back up the anchor line, I



Nikon D700, Subal, 16mm F2.8 @ F8, 1/30th sec, Manual exposure, ISO 1600

took another look below and saw one of my diving partners still near the plane. Suddenly, the Avenger looked whole again in a ghostly way ready for its next mission. I've been there twice now and can't wait to go back again....

Joseph C. Dovala
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