

Underwater Photography

a web magazine

Issue 30

May/Jun 2006



ADEX report
Sealux D200
Subal D200

Martin Edge
Deep wrecks
Moving sharks

NE Bali
Mauritius Photos
Muck and Macro

Sea Trees
Book reviews
Parting shot



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EOS 10D
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EOS 350D, Rebel XT
Nikon
D-200
D-70, 70s
D-50
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E-330
E-300
E-500

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The Ikelite SLR-DC housing takes full advantage of the digital SLR cameras 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 for Canon, Nikon and Olympus includes conversion circuitry that provides TTL compatibility with all Ikelite DS Substrobes. Housings for Canon and Nikon also include a Flash Compensation Module which provides over and under-exposure compensation in the TTL mode. At the push of a button, switch to Manual Exposure Mode which provides eight power settings. All exposure compensation is done with 2 buttons on the back of the housing, no accessing complicated camera menus.



photos by David B. Fleetham



NEW 8" Dome Port

All new dome port system utilizing a new 4" radius dome and interchangeable mounting Body lengths. Larger radius dome is better for over-under photos.

- #5510.81 Dome Port is ideal for the new zoom lenses like 12-24mm Nikon and 10-22mm Canon.
- #5510.82 Super Wide Port is for very wide lenses like the 10.5mm Nikon and 15mm Sigma fisheye.
- #5510.83 Extended Dome is 3/4" longer than the #5510.81 for longer zoom lenses.



NEW DS-200 Substrobe

Take the venerable Substrobe 200, add the newest IC chips and IGBT circuitry and you get the new DS-200 Substrobe. This ultra wide and ultra powerful strobe is compatible with current digital cameras and any TTL circuitry included in our housings. State-of-the-art electronics provide a blazing 200 watt seconds of power recycling in an incredible 1.6 seconds.




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Editorial

Come on down

I've been in this game long enough to know that the general media have a warped sense when it comes to the underwater world.

Denizens of the deep, frogmen, deepsea divers and films like Thunderball conjure up a dark and mysterious place where, if you aren't eaten alive by a denizen, your oxygen hose will be cut by enemy frogmen.

Add to this the Jaws of Hollywood legend and you have the perfect vehicle (not) for encouraging our youngsters to appreciate the underwater world.

I begrudgingly accept this situation but would have thought a responsible and august body such as

the Plymouth Marine Aquarium here in the UK would have more sense than to use this photo to promote their new exhibition "Explorocean".

What right minded person would have the brain cell to think that a picture of a shark about to eat you alive would encourage visitors to experience "a real taste of life beneath the waves etc etc".

As if this were not enough the same brain cell promise "3D sharks that snap at you out of the shadows".

The bye line states "Explorocean will set the next generation on the road to discovery". With pictures like this I think they'll be on the road to buy a speargun at least, if not an oxygen cylinder they can throw into the sharks mouth and explode with a high velocity rifle.

Welcome to the underwater world. We're all doomed.

10,000 subscribers in 140 countries

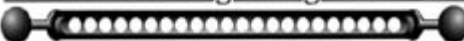
On April 27th UwP notched up its 10,000th subscriber. They were from India and UwP now has readers in over 140 countries. Welcome to the small world of underwater photography!

Peter Rowlands
peter@uwpmag.com



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www.aquatica.ca

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www.reefimages.i8.com

News, Travel & Events

DivePhotoGuide.com

DivePhotoGuide.com Offers Free Customizable News for Diving Related Websites. Now you can keep your website fresh and updated with customizable news feeds that you can easily add to your site for free. Provide your website visitors with daily news on the world of diving, underwater photo / video and marine conservation - give your customers a reason to return to your site regularly!

DivePhotoGuide.com allows website owners to customize news to match their websites' colors and layout. Best of all, it's easy and free. For more information and to create your customized news go to www.divephotoguide.com/customrss.php.

DiveNewswire.com has also teamed up with DivePhotoGuide.com to include specific industry news in feed headlines. Later this year, the two companies plan on collaboratively launching a consumer focused newswire product called DIVERNewswire.com, which will be further integrated into Divephotoguide feeds.

www.DivePhotoGuide.com

www.uwpmag.com

Dive Into Adventure Bonaire June 18-22

This digital photo contest is open to everyone, novice to expert. All digital camera systems will be allowed, both compact and SLR's and rental cameras are available (underwater) if needed.



The main goal is having fun!

However we are also striving for an educational part during the contest. Photo Pro's will be available at your host resort to provide you with tips and information, and guide you on your way to shoot great pictures. Photos must be taken between June 18 & 22 on Bonaire.

Images can be submitted digitally at your host resort or at Fish-Eye Photo on cd-rom, USB drive or can be downloaded on computer

The entry deadline is Thursday 5:00 pm, June 22nd

A \$5 entry fee per image will be submitted

www.fisheyephoto.com

Dive Fest Key Largo June 12-16



School will be out. The water's warm. The sun's shining. Mix in an adventurous crowd of snorkelers and scuba divers, and the result is Island Sun Splash '06 -- offering in-, on- and underwater fun June 12-16 in Key Largo and Islamorada.

Daily dives are scheduled to artificial reefs on the Upper Keys' amazing "shipwreck trail," including the Spiegel Grove, twin Coast Guard cutters Bibb and Duane, Eagle, Benwood and City of Washington.

Emmy-Award-winning videographer Frazier Nivens is set to lead seminars on shooting and editing underwater video.

Renowned underwater photographer Steve Frink is to host a seminar on digital photography, and acclaimed photographer Tom Stack is to host a seminar on capturing the reef by camera.

For a list of participating dive shops, lodgings, restaurants and businesses offering discounts, visit

www.divecapital.org

Upcoming International Photo & Video Competitions

Provided by:

DivePhotoGuide.com

This latest photo competition news is brought to you by our friends at Divephotoguide.com.

The Following dates are the deadlines for imminent competitions. Good luck!

May 20

Dive In 2006 Photo Contest (USA)

June 9

BP Kongsberg Underwater Image Competition 2006 (UK)

June 30

2nd Annual underwater.com.au Photo Competition (Australia)

www.DivePhotoGuide.com



September 16-23

Digital Madness is an important new digital underwater photography event designed to help photographers improve their images, learn new techniques and try new equipment, while at the same time having a great time and getting the chance to win fantastic prizes.

Digital Madness is brought to you by a special collaboration between Scuba Diving Magazine (USA), the Cayman Islands Dept. of Tourism and Cayman Airways. This event, being staged on Grand Cayman in September, will take place simultaneously at four different dive centres – Ocean Frontiers, Dive Tech, Sunset House and Don Fosters – with resident photo-pros at each location. Hosting the event is Stephen Frink of Scuba Diving Magazine who will be making guest appearances at each of the resorts.

UWP readers will be interested to learn that regular contributor and co-administrator of Wetpixel.com

Alex Mustard is running the event at Ocean Frontiers at the East End of the island. The other resident photo-pros are Courtney Platt at Dive Tech, Cathy Church at Sunset House, and Mike Nelson at Don Fosters.

Alex told UWP “This is going to be a great week and there are a number of manufacturers supporting it too – so expect lots of special treats. Grand Cayman’s waters are ideal for underwater photography because they are warm, calm and clear, making it easier to get great images. Also, from the outset I was very insistent that the diving must be organized specifically for photographers – which makes such a difference. Last time I was involved in a similar event, my group won 6 of the 7 categories in the competition. I’d like to claim that was my teaching, but it was probably because the East End of the island has the best diving!”

www.caymandigitalmadness.com

Rod Klein Wakatobi & Pelagian Digital Workshops

April - May 2007



Both the Pelagian Liveaboard & Wakatobi offer an incredible diving experience combined with unmatched comfort and convenience. Why not combine another great dive trip with a chance to learn proper digital photography from one of the masters of this new medium?

Formerly the digital editor for Fathoms Magazine, Rod is currently the contributing editor for Scuba Diving Australasia and a regular contributor to Scuba Diving Magazine and presenter at dive and photo festivals.

These special workshops will be held on two Pelagian charters and also during 10 days on land at Wakatobi Resort. The landbased portion of the workshops is sponsored by Dolphin Scuba. You can visit Rod’s website

www.rhkuw.com



**Compact digital workshops
with Maria Munn
June 15-22 & 22-29
Nov 24 - Dec 1**

Join photo professional, Maria Munn, for an unforgettable week that will improve your picture taking in a fun, friendly and relaxed environment.

These photo workshops are a fun, friendly and relaxed way to learn about, and improve, your underwater photographic skills with the personal touch. Accessories will be onboard to try out at a small charge, as well as an onboard digital lab for downloading photographs and instant feedback, combined with evening slideshows of guest’s pictures – all set to music.

Divers will have the chance to photograph some of the Red Sea’s famous sites, learn how to develop photography skills and shoot beautiful underwater images.

The Photo Workshop is just 175 Euros per person (approx £119 depending on exchange rates). And you can also take the PADI Digital Underwater Photography Specialty course whilst on the trip at an extra cost.

www.emperordivers.com

www.uwpmag.com

California Beach Dive Photo Comp June 10-11, 2006

The 25th annual California Beach Dive Photo Comp will take place in Monterey on June 10 & 11, 2006. All contestants must dive from the beach, no boats allowed!

Great prizes, including dive trips, dive and photo gear, and other goodies will be awarded to the winners.

The competition starts with registration on Saturday morning. Everyone spends the day shooting images. Images must be turned in at Backscatter Saturday afternoon. Everyone gathers for dinner and a show on Saturday evening. The judges select the winners Sunday and the winners are announced and prizes awarded Sunday afternoon.

The entry fee is \$60 if postmarked on or before June 2, 2006, \$75 thereafter. Registration on Saturday is allowed until 9 am. The entry fee includes a t-shirt and a ticket to the dinner/show. Nonparticipants may also enjoy the dinner and show for \$5.

This event is presented by the Northern California Underwater Photographic Society.

www.ncups.org

www.uwpmag.com

BSoUP Splash In July 1st 2007

For the first time in its 40 year history, digital and film photographers will go head-to-head in the British Society of Underwater Photographers annual one-day shoot-out for a major prize.

The prize for the image selected by an independent panel of judges as the best taken in Plymouth waters on Saturday, July 1, will be a fabulous one-week liveaboard holiday in the Red Sea generously donated by Tony Backhurst Scuba.

Another innovation is that the Society has teamed up with Plymouth's National Marine Aquarium to stage a major, five-week exhibition and print competition, opening on 10 June. Prints of various categories of underwater subjects will be judged by the thousands of people who visit the aquarium during the period until 1 July.

Full details of both the Splash-In and the print competition can be found on BSoUP's web site:

www.bsoup.org

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Manado, Kungkungan Bay

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Bikini Atoll
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Fiji, Hawaii,
Sea of Cortez
Revillagigedo Islands
Cocos & Malpelo Islands
The Galapagos
Wrecks of Palau

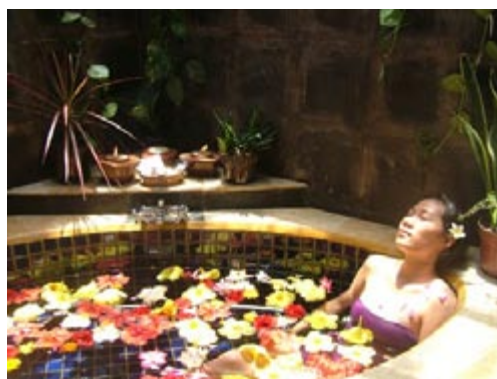
Plus Underwater Photography Group Trips and Courses with leading photographers: Martin Edge, Linda Dunk, Malcolm Hey, Charles Hood, Gavin Anderson and Alex Mustard.

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open offering guests a full range of treatments including massage, reflexology, jacuzzi and steam room. This traditional Indonesian Spa is the perfect haven for enjoying a unique and authentic experience based on Balinese tradition.

www.eco-divers.com

Eco Divers has raised its standard of service even higher than ever before with the recently completed upgrade of its three day boats to a new level not previously seen in Indonesia.

New features include two heads (which are always better than one!) now situated on the dive deck and away from the salon, personal bins above each dive station, even more camera racks and a shiny new hardwood salon floor, seats and tables. All that in addition to each boat having individual seated dive stations with 'Roll Control' tank rack system, shaded salon and dining area, large sundeck, buffet lunch, complimentary hot drinks and biscuits, twin dive ladders, camera rinse tank and even personal beach towels for each guest.

Meanwhile in Tasik Ria Resort, a new 'Matana Spa' is now



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Nai'a Fiji Digital Workshops

Feb 3-10, 2007

Feb 10-20, 2007

The Nai'a Fiji is excited to announce two digital workshops with megapixel master Rod Klein in 2007.

Each workshop will be geared to participants' individual needs. There will be sessions for beginning, intermediate and advanced shooters. Whether you are using a fixed lens digital camera or a digital SLR the workshop will attend to your special needs. Want to know more about Photoshop CS2? We'll teach you some great tips and tricks. Scared of using RAW files...no problem, we'll get you shooting and processing raw the first day. Good at macro but having problems with wide angle.... we'll fix that!

These two charters are not exclusive to the workshops; they are open to anyone even if you don't participate in the workshops (which cost an additional \$250).

www.rhkuw.com

www.uwpmag.com



For those professionals wanting to capture that special image on film the only real way to get the most from any dive trip is to take a private charter with your own personal guide to arrange everything just the way you like it!

Joining a normal charter is often very difficult for professionals or keen marine life enthusiasts to get to dive that great site at the best time or over and over again to see how it changes over the day, days or even weeks.

After working on just about all the liveaboard vessels operating in Indonesia I have seen many frustrated photographers, videographers and even more so photojournalists who need certain images to sell their story. Many often wish they had a more time on those unique dive sites that make each region special. Diving the best sites on the right tides also helps to make your filming requirements easier!

We can arrange all the logistics for your needs, even all that overweight dive and photographic gear, we make sure it will arrive, we have ways to ensure it gets there.

www.diving4images.com

Peter Scoones "Making of Planet Earth" Presentation A Great Success.



More than one hundred divers and underwater photographers attended an evening presentation on the making of "Planet Earth", the new BBC natural history blockbuster.

Peter Scoones, the Emmy award winning underwater cinematographer regaled the capacity audience for 90 minutes. Working with two screens, Peter combined footage from the show with stills taken on location. It was a fascinating insight into the trials and tribulations of the life of a professional natural history filmmaker.

The event is one of a series of



A packed audience meets the master underwater cameraman and innovator, Peter Scoones. The event was sold out a week in advance so book early for the next monthly presentation from Ocean Optics

monthly presentations hosted by Ocean Optics and Mavericks Diving.

Future speakers include Simon Rogerson, editor of "Dive Magazine", Leigh Bishop, the renowned deep wreck photographer, Mark Ellyat, author of "Ocean Gladiator" and veteran 300 metre diver and Alex Mustard and Nick Hanna, the photographer/writer duo behind "The Art of Diving".

Places at these talks are limited – Ocean Optics/Mavericks Diving stopped taking bookings for Peter Scoones' event a week before the talk.

To get onto their mailing list e mail optics@oceanoptics.co.uk

Andaman Sea with Mark Strickland Jan 16-25 2007



Enjoy magnificent scenery, widely varied underwater terrain, vibrant soft corals, diverse and colorful fish life, and a wide range of interesting critters diving in the Andaman Sea with Mark Strickland. The Ocean Rover sets out on January 16 - 25, 2007 to explore the Andaman Sea, Thailand and Burma/Myanmar.

Special highlights include friendly zebra sharks, mating cuttlefish, curious mantis shrimp, and more scorpionfish and lionfish than you can count. There's also a good chance of unusual creatures like ornate ghost pipefish, harlequin shrimp, and bright yellow sea horses.

And, there's always the possibility of big animals like turtles, mantas and whale sharks. An added bonus is to visit not one, but two countries on this cruise: Thailand and Burma/Myanmar. While the marine



environments of these neighboring countries are similar in many ways, there are also noticeable differences, resulting in a perfect balance of spectacular seascapes and diverse marine life.



Mark Strickland's life-long interest in the sea has included over 10,000 dives. His passion for underwater photography has led him to many top dive destinations, including Thailand, where he spent 17 years as Cruise Director / Photo-Pro on a series of live-aboard vessels operated by Fantasea Divers, including the state-of-the-art Ocean Rover.

Join us on the trip of a lifetime as Mark revisits some of his all-time favorite dive sites in the region he knows so well.

www.reefrainforest.com

Emperor penguins with Amos Nachoum



Join Amos in October and be the first to photograph the magnificent Emperor Penguins on the remote Snow Hill Island, Antarctica.

Imagine yourself on board a Russian icebreaker plowing through the thick ice, then lifted by a helicopter, landing on the ice and marching toward a recently discovered colony of over 4,000 Emperor Penguins!

Read about this voyage of discovery and make your reservation now ... only a few spaces remain. For more information, go to his website

www.biganimals.com

A composite image showing a white liveaboard boat on the water in the upper left and a tropical beach with palm trees and resort buildings in the lower right.

wakatobi
DIVE RESORT

**Digital Workshops 2007
with Rod Klein**

Pelagian Liveaboard	Wakatobi Resort
April 20 - May 1	May 1 - May 11
May 11 - May 18	Hosted by Dolphin Scuba

PADI DUP Course with Lars Kirchhoff and Andi Voeltz June 15-22 & July 11-18 2006



In January 2006 PADI introduced the new course for Digital Underwater Photography. It is finally a course that is especially tailored to the needs of the digital underwater photographer.

Could you imagine taking exactly that course directed by one of the co-developers aboard the supreme-service King Snefro III, while photographing the world famous reefs of the Marine National Parks in the Red Sea? If that is "yes" – you will have your chance this summer. Marine wildlife photographers and creators of the world-famous DIGIDEEP.com website Lars Kirchhoff and Andi Voeltz are leading two exclusive trips to share all their digital know-how with you. Take the perfect digital plunge this summer!

www.digideep.com

www.uwpmag.com

Seaplane Dive Adventures

Seaplane Dive Adventures are organising two tours in the Fijian Archipelago using seaplanes to offer easy access across thousands of square miles of coral reef to some of the most spectacular and remote dive sites in the world.

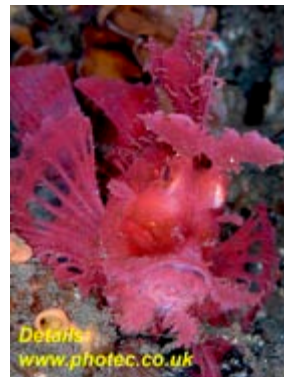


We will visit a different diving region each day, seeking out exceptional encounters with mega fauna such as whales, dolphins and manta rays, before returning to enjoy the many land based attractions Fiji is famous for.

For the first time it will be possible to dive the remote atolls and celebrated marine reserves, visit Humpback whale calving sites and Manta cleaning stations, take part in Tiger and Bull shark feeding in the rim of a submerged volcano and experience the richest of soft coral reefs in the shortest time period imaginable.

www.seaplane-diving.com

Lembah Straits Photo Workshop with Mark Webster 24-31 March 2007



Lembah Straits is now known to most underwater photographers as the muck diving capital of the world.

Mark's workshop will combine this with the luxurious accommodation of the Lembah

Resort, just minutes away from more than 40 dive sites. If you need the variety then Lembah also has some excellent reef diving on offer and even some shipwrecks. The dive centre has remarkable guides that know all the secrets of Lembah and will even help you search for a specific critter to complete your portfolio.

The workshop will be suitable for both digital and film users. Mark will be on hand to help and advise on the best techniques and solutions whatever equipment you choose to use and make a number of themed presentations on techniques to ensure successful results.

www.photec.co.uk



Rod Klein's Nai'a Fiji Digital Workshops

Feb 3 - 10 2007
June 10 - 20 2007

www.rhkuw.com

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New Products

Ikelite Substrobe DS-200

The venerable Substrobe 200 now has the newest IC chips and IGBT circuitry allowing this ultra wide and ultra powerful strobe to be compatible with current digital cameras and any TTL circuitry included in our housings. State-of-the-art electronics provide a blazing 200 watt seconds of power recycling in an incredible 1.6 seconds.

This is a high performance professional strobe with the original features that revolutionized underwater photography. Mount the DS-200 on either side of the camera and the control panel and ready light are always visible for quick confirmation and easy access. The DS-200 offers four manual power modes or can accommodate an optional #4100.6 EV Manual Controller.

The SubStrobe DS-200 delivers an even ultra wide 100 degree beam. The special "soft-lite" reflector produces softer, warmer, more natural colors. A diffuser is included to widen and soften the light even more. The built-in aiming light is more than just a target light; it is powerful enough to use as a night diving light.



The main strobe electronics are sealed from the battery compartment, and the industrial grade ni-cad battery module is easily removed. No more guessing about when to recharge; the DS-200 features an LED gauge which shows the remaining battery power.

www.ikelite.com

www.camerasunderwater.co.uk

www.uwpmag.com

AF-S VR 105 f/2.8G IF-ED Nikkor



The AF-S VR 105 f/2.8G IF-ED brings the benefits of vibration reduction (VR) to the domain of Macro photography. It offers high-resolution, high-optical performance for both digital and 35mm film format SLR cameras.

This lens incorporates Nikon's second-generation vibration reduction system (VR II) that allows flexible hand-held shooting by stabilizing the image to the equivalent stability of a shutter speed that is 4 stops faster when compared with a conventional lens (as determined by Nikon performance test). The SWM (Silent Wave Motor) and IF (Internal Focusing) ensure quiet autofocus with quick and convenient switching between autofocus and manual operation.

www.nikon.co.uk

INON Z-240 strobe



Inon's new professional grade strobe has just been announced.

The Z-240 has a high power (gn 24) for DSLR systems, wide circular beam angle, super fast recycling time and high flash capacity for large memory cards.

It features multiple flash modes, including S-TTL, 24-step External Auto, 13-step Manual & Nikonos TTL for film camera support. It can be connected with electrical cable or fiber optic cable,

www.oceanoptics.co.uk

10 Bar E330 housing



Japanese housing manufacturer 10 Bar have announced their housing for the Olympus E330 camera.

It has controls for Shutter, Exposure Compensation, On/Off, Mode Dial, Main Dial, Live View, A/B, AEL/AFL, Drive Mode, OK, WB, AF, ISO, Metering Mode, Play, Delete, MENU, INFO and Zoom.

www.10bar.com

Amphibico Sony HC3



Amphibico's new Dive Buddy EVO HD for the Sony HDR-HC3 camcorder has arrived.

www.amphibico.com



Most popular cameras

Welcome to another new UWP feature provided by DIGIDEEP.com underwater housing database

Canon 350D



The Canon 350D features eight excellent megapixels and is currently one of the most popular entry DSLR cameras worldwide.

No. of housings available: 10. Price range 1,000 USD - 1,990 EUR

Nikon D200



Still a cropped camera but equipped with more than 10 megapixels and speedy performance. It is more sleek than it's big sister, the D2X.

No. of housings available: 6. Price range 1,500 USD - 3,270 EUR

Canon PowerShot S3 IS



Unfortunately not housed yet by any of the manufacturers the PowerShot S3 IS becomes our orphan of the month. Left alone by Canon, this six megapixel SLR-like bridge camera has warmed the hearts of many divers around the world. Hopefully housing manufacturers will register the demand and make a housing.

www.digideep.com

Fathom DVD

Designed to fill the gap between online and print-based diving magazines, FATHOM is a biennial (twice per year) DVD-Magazine.

Issue One features location reports from Hawaii, Tanzania and the Marshall Islands. They are designed to give divers an idea of the diving and facilities on offer, while still leaving lots of experiences to be uncovered. Each report has its own focus, which might encompass local history, endemic marine life, local wrecks and tech diving, or simply beautiful underwater images. The reports are 10-20 minutes in duration and intended as standalone films.



FISH ID subtitles help the rusty diver to remember those species names. World record freedives, award winning films and photography, and environmental features all contribute to over two hours of stunning content spread over two discs.

The DVD costs £15 (\$25)

www.fathomdvd.com

Nexus Nikon D200

Japanese housing manufacturer Nexus should have their Nikon D200 housings available about now.

No details were available at the time of going to press but from the preliminary photos the design follows their tried and trusted castings with a large perspex port at the rear incorporating most of the back panel controls.

For further details contact

www.usanexus.com



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Visit www.usanexus.com

See all the features for the Nikon D70 that Nexus has to offer.



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Macro Lens

.54x Wide Lens

Ultralight AC-NB spotting light adapter

Do you need to add a spotting light adapter to your underwater camera system?

Ultralight has built a new part that attaches to the neck section beneath the ball of any ULCS base adapter or arm segment, forming an excellent way to mount accessory focus lights.



This new part, called AC-NB for accessory neck ball, comes as two parts that encircle the neck of any one of their other parts. There are two screws that attach the two parts together. The adapter comes with two extra screws and assembly instructions.

This new base ball is adjustable, allowing 360 degree movement of the spotting light adapter.

Clamps & spotting lights are sold separately.

www.ulcs.com



www.uwpmag.com

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Now you have your Olympus, Canon, or Sony digital housing, how do you hold onto it underwater? Ultralight makes a tray and handle to accomplish this.



Would you like to use a strobe or spotting light adapter with your new digital housing? Now you can, Ultralight makes arms and spotting light adapters to attach to the handle.



Maybe you would like to have two strobes, their tray makes into a double tray with the quick addition of two pieces.

Do you have Ikelite strobes and manual controllers and need to be able to attach those items to your housing. Ultralight makes adapters for the manual controllers that have a ball on the end so you can then add arms.



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ADEX 2006 report

by Eric Cheng

After three weeks in Palau and Yap at the Digital Shootout 2006, I flew to Singapore for this year's Asian Dive Expo (ADEX).

ADEX is tiny compared to shows in the United States and Europe, and I was told beforehand by more than one person to “not expect much.” But what I discovered when I arrived was a tight network of dive operators, tourism representatives, manufacturers, distributors, publishers, editors, and photographers working together to further the industry as a whole (for the most part). Three days hardly seemed like enough time to meet and befriend all of the people I wanted to see, and evenings were spent out dining and hanging out at bars, often into the early hours of the morning.

Bonica Precision



ADEX is a tight network of dive operators, tourism representatives, manufacturers, distributors, publishers, editors, and photographers working together to further the industry as a whole

William Wai (Left) of Bonica was showing off the Digital Snapper, a 3 megapixel “camera in a drysuit.” The camera itself is waterproof and dustproof for snorkeling. When placed in its underwater housing, it can then be used while scuba diving. The Digital Snapper can be purchased alone for \$199 USD, or with a tray, arm, macro lens (wet), and strobe for \$599 USD.

Green Force / Hugyfot

Tom Leys took me through a tour of the Hugyfot underwater housing for the Nikon D200. Hugyfot housings have always been beautiful and compact, designed to hug the housed camera for the smallest possibly package. Hugyfot has traditionally not been well represented in the States, but you can expect more representation in the immediate future.

I can see why the housings have been popular



in their target markets: they feel great in the hand, and are well-designed. But a small, rounded package has its compromises: Hugyfot housings require an allen (hex) key to open and close, and the company sticks to this design principle, refusing to switch to any sort of latch -- until a nicely designed latch exists, they say.

Green Force lights are very popular in Europe, and are probably the only lights than can be assembled into different forms based on a modular light, cable, and battery system.

Olympus

A strong supporter of underwater photography, Olympus had a prominent booth where they were showing off E-System underwater housings & accessories and the new μ [mju:] 720SW camera, which is 7.1 megapixels and waterproof to 3 meters (10'). It looks like a wonderful camera for snorkeling and dive deck use.

Patima

Patima is a well-respected engineering firm in Korea, but has not penetrated much of the Western market yet. The first distributors are being set up in the States, and the housings will surely be successful if Patima can set up good distributors and contacts overseas. Patima housings are machined aluminum, and have a nice feel to them. They are priced well and may end up being one of the only machined aluminum housings roughly in the same price range as plastic housings.

Patima currently only has one dSLR housing (for the Canon Digital Rebel XT / 350D) and one video housing (for the Sony HC1), but have plans to expand their line-up soon. They also have a line of underwater lights, which seem to be high quality and flexible, with various mounting options and battery shapes.



Seacam



Consistent design is one of Seacam's goals, and it really shows. Seacam had on display their brand-new Nikon D200 housing, which has the same, luxurious feel as the rest of Seacam's products. I'll bet I could switch to a Seacam-housed D200 and barely notice.

I also played with Seacam's new strobe, which has an indicator



that displays the last fired % power in order to prevent wrong settings. Seacam claim that their strobe is the only one that can fire in E-TTL with two strobes connected at once (E-TTL support requires S6 bulkhead and cords). The Seacam strobe doesn't currently have removable batteries,

but they assured me that removable batteries will be a feature of the next strobe they design.

Eric Cheng

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Sealux CD200 housing for the Nikon D200

By Colin Gans

This review is written from the perspective of:

a current Nikon DSLR owner with an investment in compatible glass;

a current Sealux underwater housing owner with an investment in compatible ports, strobes and cables;

someone with an upside down view of the world who sees the sunrise earlier than most (I live in New Zealand).

The camera

The Nikon D200 offers a professional quality digital SLR camera in a smaller package than the flagship Nikon D2X. I have compared its capabilities to its stable mates, the larger and costlier Nikon D2X as a 'role model'; and the lighter and slightly smaller Nikon D70 from whence I came. While a review of the camera itself is beyond the scope of this article, it is worthwhile noting that from an underwater perspective the main differences between the D200 and the D2X are the smaller physical size of the D200 and the

D200's lower price.

Where I live there is a saying, 'If you don't like the weather, wait half an hour'. In the world of digital cameras there could be a similar saying, 'If you don't like the price/capability of the camera, wait a year for the next model'. Who would dispute the blindingly fast pace of consumer digital imaging advancement over the past ten years. Between the D2X (released Sept '04) and the D200 (released Nov '05) there is a 2.2MP difference in image resolution. This is not as great as some D2X owners would like to think and forward thinking stock agencies who previously drew the line at the quality level of the D2X now consider images taken with the D200. Punters may argue that the newer D200 has most of the quality advantages of the D2X in a smaller and less expensive package. The combination of price, build, size and digital image quality, in today's terms, makes the D200 a good candidate for underwater use. However, there are a few downsides to moving up the quality ladder. The



D200's higher battery consumption means that I am forced to change batteries each dive day rather than every three or so with the D70. For storing and archiving digital negatives there is a less obvious advantage; firstly for the D70 and next for the D200 over the D2X: the Digital Asset Management costs are lower with smaller RAW files. More so because most photographers store multiple versions of images and this does

become significant over time.

Compared with the Sealux CD70 housing

The first thing that struck me about the Sealux CD200 housing for the Nikon D200 camera is that it is actually no bigger than the Sealux CD70 housing for the Nikon D70 camera. In fact it is marginally smaller. The specs on paper show



A lever is provided for the flash mode button (for rear curtain synch) and another lever for the Single servo and Manual focus settings; however, this lever does not have sufficient range to

a slightly decreased length (the direction that the lens lies) down from 131mm to 129mm. Fitting a slightly larger and heavier camera into a marginally smaller housing is an interesting approach. The Nikon D70 is already a snug fit inside the CD70; which, is one of the more compact D70 housings available on the market. The CD200 is heavier both topside and underwater. My freshwater testing



A single control lever for WB and ISO is provided but the third of the trio, to access the QUALITY button is missing.

with a 60mm Nikkor lens and the Sealux PN94 flat port on both cameras in respective housings produced the following results. The CD200 weighed 0.43Kg underwater while the CD70 housing was neutral. Topside the CD200 weighed in at 4.75Kg with camera, the 60mm lens and flat port.

Challenging controls

Features of the housing which I think would be a challenge for a manufacturer to build are as follows.

A control for the flash mode +/- button: a lever for this obscurely placed button has been provided



The USB port and memory card can be accessed without removing the camera

and placed in an accessible position allowing setting for rear curtain flash synch when required.

The ability to remove the storage card and access to the USB socket without needing to remove the camera from the tray: the D200 storage card door opens to the side of the camera whereas the D70's opens to the back of the camera; this may be an issue for housings seated well into the case. On the CD200 the camera back extends well out of the main case when held on the tray so both the storage card and the USB socket are easily accessible while the camera remains fixed.

Controls for the ISO and WB: a single control for ISO and White Balance is provided by a toggle button but the third, of the trio, the QUALITY button is not accessible. The ability to change image quality underwater is arguably unimportant.

A control to switch between



single, continuous-low, continuous-high (motor-drive) speed shooting. This would require two actions, one to depress a small release button while the other rotates the mode dial. I do not expect any manufacturer to provide this feature.

The CD200 housing boasts some tried and tested design features such as:

- a raised inner lip on the housing body which prevents water droplets from contaminating the housing interior once the lid is removed;

- three possible mount locations for strobes, one on each handle and one on the left side of the casing;

- a sacrificial zinc anode on the casing strobe mount (I have noticed on my D70 housing how useful this is as the casing looks like new yet noticeable corrosion is evident on the anode after 1.5 years);

- a large 126mm diameter lens port opening with good bayonet

fitting system. The tubular flat ports have an outside diameter of 135mm (the glass on the 180F fisheye dome port has an outside diameter of 180mm);
an (optional) audible moisture alarm;
the magnified prism Grand Viewfinder (optional).

Absent from the CD200 housing are:

no control for the Function button (Ikelite appear to be the only manufacturer to-date offering this control);

no control for the QUAL button, one of the ISO, WB and QUAL trio;

no control for the AF-ON button;

no mode dial to switch between single, continuous-low, continuous-high speed shooting;

no Continuous servo AF (AF-C) focus mode control which allows the camera to focus continuously while the shutter release button is half pressed for release priority shooting. The Single servo and Manual Focus settings are accessible through a single lever but the control does not have sufficient range to rotate to Continuous servo setting.

My initial feeling is that the two controls which I may miss are the Continuous server AF control and the Function button. The Function button is the lower of the two unlabelled buttons on the front of the camera and is user assignable; default is Flash Value lock. While I do not consider the Function button to be a show stopper, access to the AF-C lever may be a significant omission.

Highlights in brief

The grand viewfinder provides excellent coverage and is a pleasure to use underwater. I

believe that this component is also produced by Sealux for SUBAL housings.

The housing is durable and compact with the camera fitting snugly; this is not a 'one box fits all' housing.

The housing's Teflon coated anodised, milled aluminium offers good scratch resistant protection on the outside, looks good and stays looking good if correctly maintained.

Controls have a positive feel and are easy to use with gloved hands.

While the handgrips first appear to be flimsier than those on Nexus housings, they do feel to be in the right position for shutter release and control. They do tend to flex a little when strobes are extended.

It is possible to remove the camera's memory card without needing to unscrew and remove the camera from the housing tray.

It is also possible to switch lenses from the front of the housing through the port opening while the camera remains mounted in the housing. For lenses with zoom gears, using a lens removal tool may be used to access the camera's lens release button.

Sealux's hollow tubular strobe arms increase buoyancy and reduce dry weight. The longer arms are slightly positive in fresh water. The arm clamps are well designed and have a good bite on the standard 25mm balls. The T piece screw clamps allow fast removal of the complete arms from the housing and also easily secure these without any noticeable play. The 25mm balls can also accommodate the arms of other manufacturers such as Ultralite or Ikelite. I use these interchangeably.

Three mounts are provided for attaching strobe arms, one on the left side of the housing and two on



The grand viewfinder provides excellent coverage and is a pleasure to use underwater

the housing handles.

Lens port construction is a combination of optical glass bonded to a durable, high strength machined delrin plastic barrel utilising a bayonet style fitting with an O'ring seal on the port barrel and are easily installed.

The 18-70mm Nikkor lens can be accommodated in either a DOM106 dome port, with a #2 close up diopter, or in the PN94 flat port.

The same 180F dome port may be used for the 10.5mm fisheye and Sigma 15mm fisheye lenses. This port may also be used with the Nikkor 12-24mm DX lens by adding a 28mm extension ring. A lens gear is required for the Nikkor 12-24mm lens to allow the zoom to function using the zoom / manual focus wheel.

Observations in setting up

Once correctly aligned the camera fits snugly on its supports and is held in place on a base plate with a single tripod mount screw. Sealux recommends removing the storage card until the camera is correctly mounted on the base plate.

It is important to ensure that the camera is powered on and that the housing power switch lever is also correctly aligned by placing in the on position before inserting the camera into the main housing case for mounting. It is also important to ensure that the Auto Focus Area Mode selector is correctly aligned, that the focus mode selector and main command dial controls are pulled out and that the lever for +/- and mode buttons are neutral.

The flash foot cable is inserted into the camera hot shoe after switching off the power once the camera has been secured in the tray by tightening the mounting screw.

The moisture alarm can be easily tested by applying a moistened finger to the exposed contacts prior to installing the camera.

Observations in Use

The grand viewfinder is exceptional and a pleasure to use.

Shutter trigger lever – good

positive tensile feel with sufficient feedback on the half press to activate autofocus and metering.

The AE / AF Lock lever opposes the direction of the shutter lever and it is easy to control both with finger and thumb while holding the handgrip.

Lens zoom gear works well on the 12-24mm lens with DOM180F port; this lens can still be removed from the front of the housing by removing the port if a lens removal tool is used. I use a small Allen key covered with plastic tubing as a lens removal tool.

The handgrips are well located giving good balance and leverage for aperture, shutter trigger and zoom controls.

Aperture and shutter speed dials work well with good tensile feel in the water.

As mentioned above, removing the memory card and inserting the USB cable can both be done while the camera remains mounted in the front half of the housing.

Initial assembly

The only issues experienced during first time setup were a malfunctioning strobe caused by a stiff strobe foot not engaging far enough into the camera hotshoe. This was resolved after troubleshooting. A minor adjustment was required to

the wheel on the main control dial as it was not engaging. A small Allen key was required to extend the wheel closer to the command dial.

Conclusion

I am pleased with the CD200 and can see myself getting years of use from this professional level housing. No offering is entirely perfect; affordable, functionally complete, ergonomically flawless, compact, durable, of a high quality build and which minimizes the risk of leakage by simplifying camera set up. Purchasing from a German manufacturer when living on the other side of the world in New Zealand may be considered risky come time for support. When I have needed support however, Sealux have been helpful and have taken my relative remoteness into consideration in resolving issues. On one occasion, rather than insisting on returning the housing to them for adjustment at my request they shipped the part with installation instructions. With further use I will no doubt learn more of the flaws and grow to appreciate the good features. I would recommend this housing.

Colin Gans

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Subal ND20 for the Nikon D200

by Peter Rowlands

The Nikon D200 looks set to become the most popular DSLR to be used underwater and it is no surprise that all the major housing manufacturers are gearing up to produce housings. Subal were one of the first past the post and UwP was sent their ND20 to review by their UK agent Ocean Optics.

As a self confessed Subal fan, initial impressions are that, once again, Austrian designer Arnold Stepanek has excelled himself. The subtlety of design and form produced by machining a solid block of aluminium are quite remarkable. The external curves are step free and the paint finish is first class. The result is a highly desirable housing which looks great in both form and, in the main, function. It comes as standard with an LED leak detector, two handles, sync sockets and flash arm mounting shoes, one on either side giving a pleasing visual symmetry.

The housing is best opened face down and is secured by two of their QuickLoc latches on either side of the rear plate. These incorporate large stainless steel registration pins to keep the front and rear sections precisely positioned.

Pushing the QuickLocs down and rotating them 90° releases the rear plate to reveal the chunky baseplate onto which the D200 is attached via the tripod screw. Prior to sliding the camera into the housing you need to remove the viewfinder rubber surround and the LCD protector and then



turn the camera on and set the housing 'On/Off' control to 'On' to ensure correct alignment and operation.

In addition you need to make sure the autofocus select lever and focus pattern levers are correctly aligned. The former can be jiggled into



place if you forget but the latter must be properly aligned.

Rather than list all of the controls which are provided (which is about 99%) it will be simpler (and lazier) to list those that are not! The only real omission is there is no flash adjustment button on the left hand side. This lets you adjust flash exposures and choose different flash modes such as rear curtain sync underwater. For some this will be missed and others not. I suspect the left hand flash sync socket limited access to this control.

Other than that, you can fully control the camera and the ergonomics are pretty good. I still say Subal should produce a shorter stemmed right handle but this is an injection moulded part of which they probably

have hundreds in stock. It's a bit of a stretch to the rear command dial and toggle buttons but this isn't a big deal.

My Subal housing came with the GS viewfinder which, as always, is superb if expensive. The D200 viewfinder is more akin to the D2x than the D70 so I wonder if the GS is absolutely necessary with the D200 but, having had a GS on my D70, I wouldn't settle for less. Lucky me.

The large LCD 2.5" screen is a big bonus on the D200 and Subal's viewing port is well shrouded by both the housing wall and the GS viewfinder.

The twin flash sockets have internal wiring connectors so you can choose between manual flash triggering or TTL depending on the flashguns/housings you are using.



All of the controls have decals to remind you of what all of the buttons and dials are for. These are essential because there are so many controls and you need to know what they are for before you activate them in the heat of the action.

After a while it becomes quite difficult to review new housings. They usually do what they say and have most, if not all, of the controls that are needed and in mostly the right place. The Subal is no exception except to say that the D200 camera is a class act at a reasonable price and size compared to the D2x. Put it in a Subal housing and, I believe, you have a not far off perfect picture taking machine and hopefully one which will be around for a few years before those fiends at Nikon bring out the D300



(haven't you heard the rumours?!).

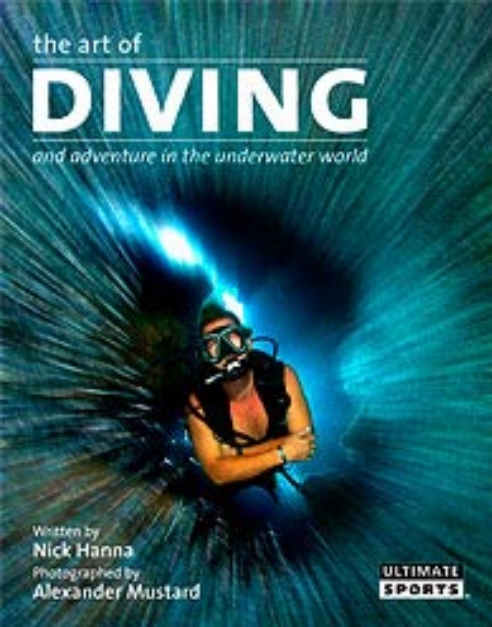
I am grateful to both Ocean Optics for supplying the housing and the amazingly trusting JP Trenque for loaning me his D200 to do this review.

It is with great sadness that I am having to pack them up and return them to their respective owners.

Peter Rowlands

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From "The Art of Diving"
I am particularly grateful to Ocean Optics, London, who supply and maintain all my underwater equipment.
Dr Alexander Mustard

THE ART & TECHNIQUE OF
UNDERWATER
PHOTOGRAPHY
Mark Webster



From "The Art and Technique of Underwater Photography"

I would like to take this opportunity of extending my thanks to...Steve Warren at Ocean Optics, London, UK...
Mark Webster



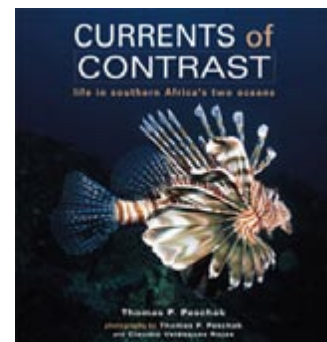
From "Dive in Style"
Ocean Optics of London will give you totally unbiased advice, even to the extent of losing themselves a sale.
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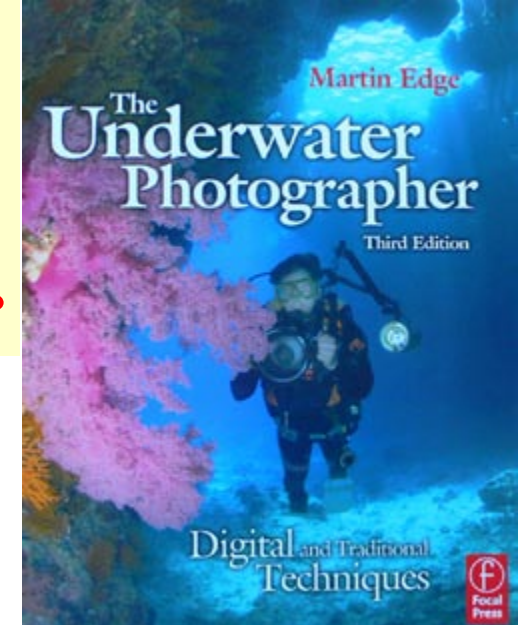
From "The Realm of the Pygmy Seahorse"

The Ocean Optics team in London - Andrew Bell, Matt Crowther, Andrew Pugsley, Sidharth Thaker - were in the unenviable position of trying to satisfy my photographic needs and supporting me in the field.
Constantinos Petrinou



From "Currents of Contrast"

I would never have successfully completed it without the great generosity, enthusiasm and knowledge of the many people whose paths crossed mine on my many journeys: Steve, Andrew, Dan (Ocean Optics).
Thomas P. Peschak



From "The Underwater Photographer"

I would like to thank... Steve Warren, Colin Doeg and all the staff of Ocean Optics, thank you for your continuing support.
Martin Edge

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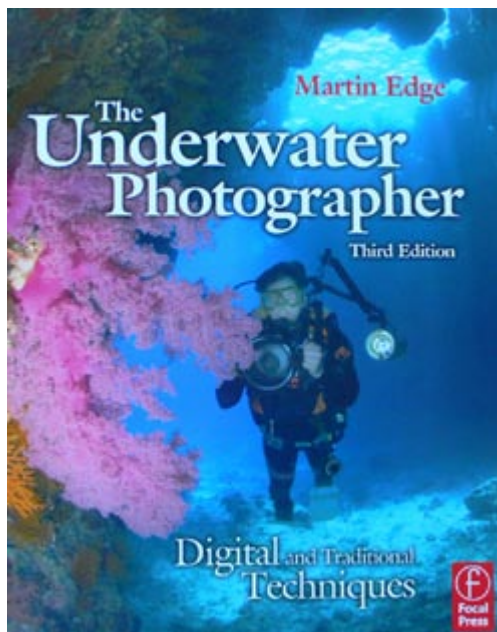
Martin Edge

UwP:

Underwater photographers are familiar with your previous books but how did this 3rd edition come to fruition?

ME

The 2nd edition of 'The Underwater Photographer' published in 1998 had become somewhat dated, particular with the popularity of digital photography over the last four to five years. In 2004 I started planning two new books, both digital. One book was to look at the basics of digital underwater photography, the second was to concentrate on lighting, wide angle, close up and composition. This series was to be called 'The Underwater Photographer Goes Digital'. My publishers of the previous editions - Focal Press, were very enthusiastic but had their own ideas about the title. They wanted to maintain the name of the previous editions and retain a reference to the medium of film. In a management meeting we agreed upon the "Digital and Traditional Techniques" sub title.



They wanted two books with the lighting wide angle, close up theme etc, as a follow up title. I wrestled for some time with the content and structure and came to the conclusion that I wanted to include everything I could in one big book. I persuaded them to increase the budget to accommodate an additional 220 pages whilst maintaining a retail price of £24.99. They agreed and in May 2004 I spent the day at Starbucks coffee shop in Bournemouth where I first put pen to paper.

UwP:

How were you able to combine both books?

ME:

I decided on 5 Parts. The Basics,



Of all the underwater photographs I have taken this particular shot has the most significance. I could describe it as the moment when photographically, the 'lights came on' for me. At that time I was a very happy snappy scuba diver but I knew I

wanted more out of my photography. During an Easter weekend dive trip to Cornwall, UK I came across a jellyfish which had been stranded in a large two metre deep rock pool. I instinctively knew that the circumstances would provide an opportunity

to take a very good picture. I surprised my fellow divers and 'excused myself' from the afternoon boat dive on a well known wreck. They thought I was crazy to miss a dive in favour of snorkelling in a rock pool. That weekend, jellyfish were in abundance. So, why not shoot one in the sea after the dive? My 'gut' feeling indicated that the rock pool was the right decision. The word that continually came to mind was 'Potential' this opportunity had great potential! My buddy and I spent an hour or so in the pool and I came out with this natural light shot taken on a Nikonos III with 15mm lens. It was soon after this picture that I first labelled the features of the TC system. It all fell into place and I never looked back. Shallow water environments have always been a strong feature of my photography since that time



I have seen and shot numerous fireworms, but rarely have I see one situated on such excellent negative space. I took several shots before it crawled into a 'Nike' logo shape. The colours of both subject and background are similar however it is the texture of the fireworm that helps contrasts against the colourful sponge. Nikon D100. 60mm macro lens. Single Inon flash gun. F32 @ 180th second

Digital Revolution, Using SLR's, The TC System and the 5th and final part designed to incorporate all of my ideas from the intended 2nd book. This last part, although I had no label for it at that time, came to be known as 'The Big Four' and to all intents and purposes became a book within a book.

UwP:
The Big Four sounds interesting, tell us more.
 ME

Whilst teaching underwater photography for sixteen years I have become aware that four main topics dominate peoples thirst for knowledge. In no particular order they are lighting (both flash and



Unlike many other fish, if you adopt a frontal angle on puffer you will see that both eyes are visible and pointing forward. The peak of the action is when they revolve their eye sockets and look directly at the camera. This provides strong eye contact and impact. Notice the compositional format and the eye level angle of view. My housing was on the sand. By using a 200mm lens (300mm taking into account the digital conversion) the puffer fish is unaware of my presence and totally at ease. Nikon D100. 200mm lens F11 at 180th second. Two Inon X220's each side of the macro port pointing outwards towards the side of the puffer

ambient light). Composition, Close up - Macro and Wide Angle. More than half the books, 220 pages are dedicated to these four topics. Hence the title 'The Big Four'. I set out to discuss these four topics in as much detail as possible. As a visual aid I drew 'mind maps' on a flip chart and listed as many related themes

as I could think of. As a result - Composition runs to 26 pages, lighting has 36 pages, Close up and macro 60 pages and wide angle, a whopping 65 pages! My aim was to keep it easy to read, thorough but most of all informative. The readers will be the judge of whether I have succeeded or not.



There are many mangrove swamps in Sulawesi. I knew of one in shallow water which produced vivid reflections. Equipped with a 10.5mm fisheye lens I snorkelled into the inlet with just fins and mask. I took forty minutes and composed a number of reflections using tree branches against the backdrop of dark volcanic sand. Nikon D100. 30th second at F 4. Natural light

UwP:

Digital photography has developed so much during the time you were writing. What challenges did this present?

ME

Part 2 'The Digital Revolution' proved to be 'difficult' to say the least. I wrote a chapter about Memory Cards but by the time I had finished that chapter the size capacities of cards had all doubled in size!

Another prime example was my

aim to discuss and illustrate a simple digital work flow idea for a typical uw enthusiast. I used the current edition of Adobe Photoshop CS but as the book was submitted, Photoshop CS2 had been launched. I realised that I could not maintain the speed of digital developments in my writing but I could try and anticipate progress and changes. From the early stages of their release I thought the Nikon D70 and the Canon 20D would be popular DSLR's for the future and I



A tiny light coloured shrimp situated in a small but very accessible hole on white coral sand. I was using a ring flash, which I knew would illuminate everything in the shot. I set F4 on my 105mm lens in order to reduce the D o F to a fraction and create blur (see the chapter on Bokeh). I composed the subject, ensured that the eyes looked sharp in the viewfinder. I set my shutter to an arbitrary 125th second and took three shots. I was hopeful that the eyes would be sharp but I took three shots to make sure, given the minute D o F. It as well that I did, only one shot out of three had the sharpest point of focus on the eyes! The magnification of the lens was at its maximum. Nikon F100. 105mm macro lens in a Subal housing. Edge Sullivan ring flash on TTL. Ektachrome VS 100.

took every opportunity to use them. Several days before the book went to print I had access to the recently released Nikon D200. I borrowed a Nikon D2x, rented studio space for an hour and photographed both cameras side by side. I anticipate that the

Nikon D200 will become one of the most popular DSLR's for underwater photographers for some time to come. I have 'nailed my colours to the mast' with this but only time will tell.

UwP:

There is a chapter in Part 1 regarding the environment and diving techniques when taking pictures. I believe you use this approach when conducting photo workshops abroad. What is it all about?

ME:

I wrote this piece three years ago always intending it to feature strongly from the outset. I am totally committed towards reef and marine preservation but I do feel that underwater photographers come in for more than their fair share of criticism. The codes of conduct and rules generally state 'what not to do' I wanted to re-address the balance and discuss 'what you can do' to get the shot whilst maintaining all due respect to the environment and its creatures. For instance, the ultra close macro shots of seahorses are achieved by getting physically close, but rarely is it discussed how to accomplish this. I use these techniques as a briefing guide at resorts which host our photo workshops. Participants and dive-guides understand where each other are coming from. It's discussed topside and employed underwater. It reinforces photographer/guide relationships and demonstrates the respect which we all have for the environment.

UwP:

There are many images in the book, which equipment did you use?

ME:

I have four years worth of digital photographs taken with a Nikon D100 in a Subal housing. I have also drawn on my stock of film work taken since 2000. Since the book took shape I have taken the opportunity to use different DSLR's in various housings. The Canon 10D and 20D, Nikon D70 and D2x in Subal, Sea & Sea, Ikelite and Nexus housings with a variety of lenses and flashguns. There are so many digital compact cameras and housings on the market at present I found it difficult to keep pace with the sheer number to choose from. For compact illustrations I opted to use the popular Olympus 5050 and 5060 with various flashguns.

UwP:

Do you have a favourite system?

ME:

I only used it on a handful of occasions but I was smitten with the Nikon D2x. I am of the opinion that the Nikon D200 is set to take the uw photo market by storm. I have recently purchased the D200 and I anticipate that this will be my first choice of camera for the foreseeable future. I just hope that it lives up to the performance of its big brother

UwP:

For many years you have promoted a philosophy of picture taking which you call the TC system. This also forms part of the book. How did this transpire?

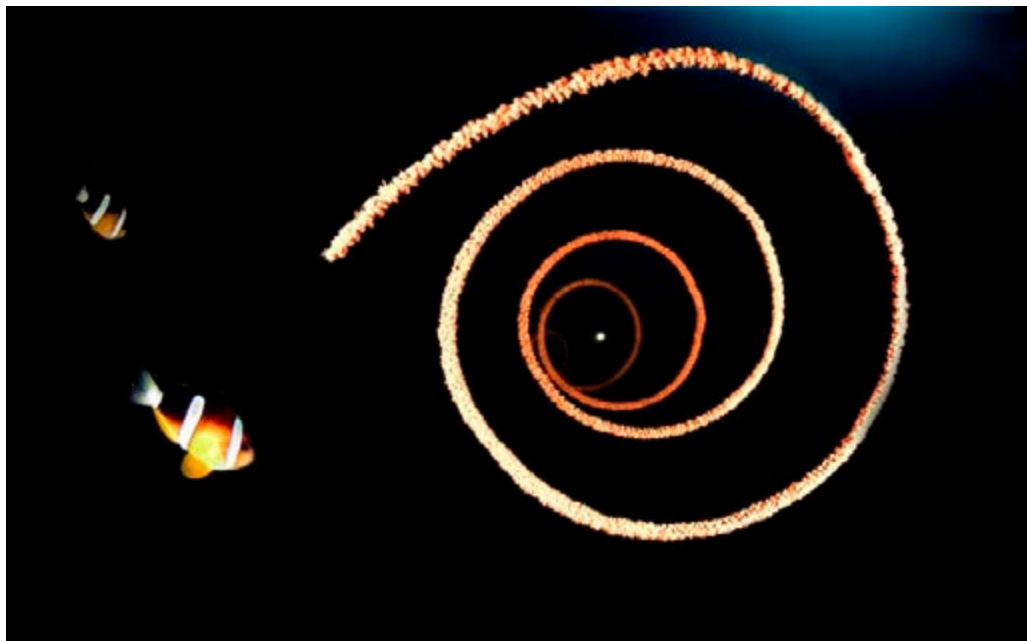
ME:

I wrote the TC system on the back on a car-park ticket in the late 80's. I had given a presentation to BSOUP in London and had been asked quite a profound question from a member of the audience regarding my mindset process when I enter the water for the purpose of taking pictures.

In answering, I used the analogy of driving a motor car and having to make instinctive decisions, continuously whilst behind the wheel. Overtaking, indicating, pulling out, turning left etc. When you learn to drive these decisions are very conscious and thought-out. In time, they become intuitive and you just do it. When I became interested in underwater photography I had to learn all the nuts and bolts. Apertures, shutter speeds. It was a brand new language altogether. Unfortunately, I was not blessed with flare, imagination and creativity. I had to consciously think about things but in time my mindset became quick and natural, like when one drives a car. I began to achieve underwater images



Taken in the southern Red Sea with a Nikon D100, I composed the branching soft coral with the sun burst directly behind it to avoid it causing gross over exposure. I chose the colour of blue water by selecting a frame which looked most natural in my LCD review. With those camera settings I went to work. Using twin Inon flash guns with manual power settings and diffusers, I maintained the same composition but adjusted my flash angles to give an even spread of light. A flash both above and below my dome port close to the housing but pointing both above and below the coral branch respectively



I had been searching the reefs around Manado, Indonesia all week for whip corals with a perfect spiral. I took a snap shot with my digital SLR and showed Sylvia who was happy to model for me. Instinctively she took up a position at the rear of the spiral and pointed a Kowalski dive light towards the camera. I was pleased but very surprised when I viewed the LCD screen to see that two clown fish had swam into a prefect position to balance the entire composition. Complete luck!

Nikon D70. 10.5 mm fisheye lens in Subal housing. F16 at 125th second. Two Inon Z220 flash guns placed very close to the dome port just behind the two side shade constructions. The foreground is no more than 8cm in front of the dome

which pleased me and I became aware that instead of shooting away blind and snappy, I was giving thought to topics such as 'where to place my flash guns'? Do I choose a portrait or landscape composition? When to press the shutter to achieve the 'peak of the action'?

I used to suffer from the

syndrome which I know plagues numerous underwater photographers. Brain malfunction! That inability to remember anything about photography once I was underwater. I had all these ideas of what I would do with this subject or that subject. But once my head had sunk below the surface. Pow! All my knowledge and



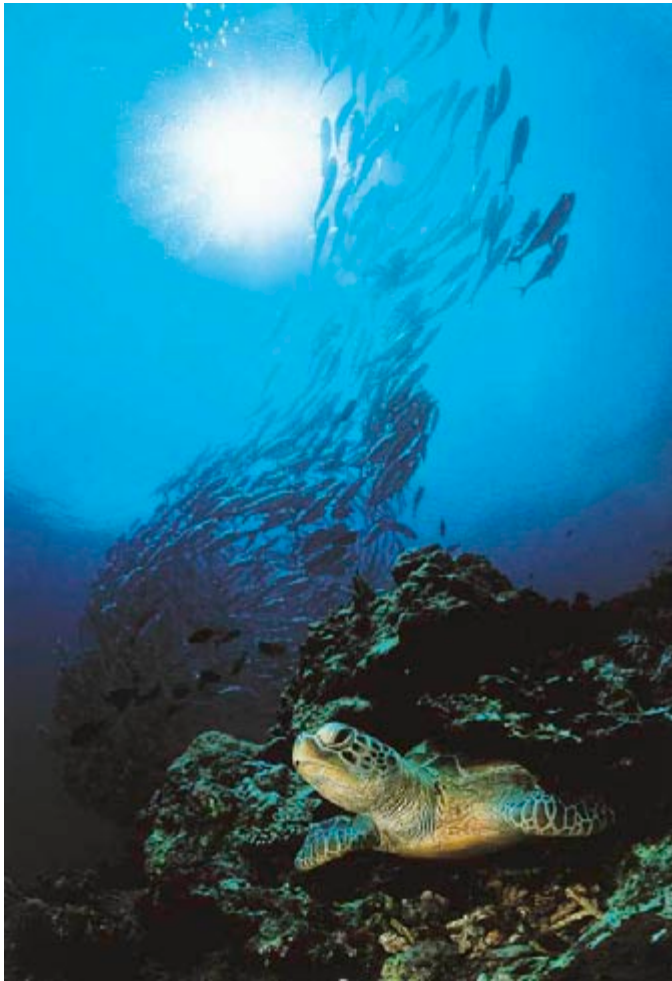
This wreck of a Russian cargo boat at Rocky Island in the Red Sea is ideal for photography. We entered the water whilst divers from another boat were beginning their 'deco stop' on the shot line. I took this opportunity to select a strong composition and a series of natural light 'Polaroid's' gave me feedback on the best exposures so as to bring out detail of the wreck. The divers left the water; I took a series of shots with and without a model. Compositionally, I choose a landscape format with a diagonal orientation of the stern leading the eye left to right through the frame. Sylvia my model swam at various angles over the wreck. I shot 'cloudy' WB and adjusted it in the Raw converter with the white balance sampler tool.

Nikon D100. 10.5mm fisheye lens. F8 at 90th second

ideas had vaporised into thin air. I figured out that I was so preoccupied with the dive or loosing my buddy or flooding my camera that I could think of little else. So I worked on reducing my preoccupations and increasing my concentration. As a result of this question from the audience I

effectively labelled how I approached my photography and when I began to write 'how to' articles and teach I used this method as a way of communicating how it was done.

I wrote an article and called it 'The TC System'. Meaning TC - Think and Consider. Just a few simple



The potential of an opportunity is very subjective. For instance – over the years I have shot numerous images of turtles and schooling fish which are both in abundance on Sipadan Island. I no longer have the inclination to shoot turtles with the same enthusiasm that others may. During my last trip, whenever we found the large schools of either jacks or barracuda, I began to check the reef immediately below them for subjects which I could include in the foreground whilst the schooling fish would occupy the negative space. The image below is one such encounter. I

found the schools first and took advantage of a sleeping turtle which I knew the school would swim over. I only managed to take two shots before the turtle swam away. Nikon F90x 16mm fisheye lens, two Sea & Sea flash guns set to TTL

things before you press the shutter. It stuck from thereon and if I look back now I realise it was the start of my vocation towards showing others how to take underwater photographs.

UwP:

Which other photographers have influenced you the most?

ME:

The teaching gurus who were huge in the 1980's, Jim and Cathy Church. Howard Halls first book 'Successful Underwater Photography' was very influential.

Like many others I was entranced by David Doubilet's wide angles and Christopher Newberts close ups and abstracts. I studied their individual styles and I know I have been influenced by them in my own picture making. In the early 1980's, BSOUP was an exciting place to be and I was inspired by the work of Peter Scoones, Kevin Cullimore and others. Not just by what they produced but their dedication, patience and persistence in the water plus their eye for light and composition. Light and the effects of underwater light have always influenced my own work and the kind of images I enjoy taking the most.

UwP:

What is your next project?

ME:

My first priority is to continue to promote the

book. I want to ensure that it reaches underwater photographers wherever they may live. I am pushing for translations; I would really like to see it in a Japanese version, the interest in underwater photography in Asia and the Far East is vast. On the UK front - I will continue offering one 2 one underwater photography tuition and running workshops to sunny climates. I may even enter a competition or two, though competitions have rarely featured in my list of 'things to do'.

UwP:

And finally, what advice would you give to an enthusiastic photographer who is intent on improving their ability?

ME:

My obvious answer is to buy the book, but on a more serious note the best way to hasten the learning curve is to join a workshop or an organised trip of other underwater photographers. It's not all about learning from teacher. It's being in the water with fellow enthusiasts and watching others go about their business. How they dive to take pictures, how and why they choose certain subjects, why they discarded other subjects. On organised trips you get to repeat successful photo sites, you go diving for wide angles when the sun is in the right place. You can work a school of fish in the morning and shoot the same school after lunch. You compare your results with others which often encourages other ideas and ways of doing an opportunity differently. One of the great advantages on these types of trips is that you don't have to follow the dive guide unless you choose to!

Thanks, Martin, and every success with the book

What links these sites?



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Dancing with Light

by Leigh Bishop

Diving deep shipwrecks is a demanding past time, photographing them presents an even more technical and task laden challenge. Frustrated by ever-present backscatter Leigh Bishop explains why he swapped his strobes for a tripod and took the ambient light monochrome option.

The incredible infrastructure of shipwrecks that lie on the seabed around the world represents thousands of actual known sites, certainly a Mecca for wreck divers indeed. With a fair share of these wrecks a little on the deep side and as temperate as certain waters can be, the odds of capturing that 'Big' image of our rich maritime history' is stacked against us. As they say there's a means and a way around everything and abnormal as it may sound if setting a tripod & housing system up at a depth of 230ft/70m then shouting orders at your models is the way around, well then so be it. Deeper shipwrecks impose so many problems in diving them. You quickly get that feeling that someone above is letting you know you're not naturally supposed to be there. Physically altering and balancing partial pressures of gas mixtures in order to breathe is perhaps as good a reason as any on its own not to be there. Add to that all the extra equipment you need, knowledge, courses, the journey out to the site and getting the slack right, nature herself may have a valid point. Throw a camera in the equation and you could well find yourself questioning even your own sanity!

As with basic underwater photography



Divers at 230ft (70m) drift across a bulkhead break of the Justicia's boiler room. Afa scala 200 multi speed film pushed to 800ISO F22 – 4 secs

lighting & colour present they're own independent problems, the deeper you go technical problems to overcome begin to build. The filtration of light through water effects colour according to depth, take a calm millpond day for example with the sun high the first colours to be lost are reds & oranges at approx. 26ft/8m then yellows and greens at around 66ft/20m and finally blue at 115m/35m. Keep descending and from here on to keep those precious colours you have to take your own cans of

light in the form of strobes. Strobe lighting is yet another topic in photography circles that can never be complete, beyond 100ft/30m you're going to need some big mothers to illuminate large sections of wreck especially if you want to bring out colour as well. Artificial lighting also has a tendency to illuminate suspended particles in the water know as back scatter, a frustrating and ever present problem that haunts myself and no doubt many worldwide photographers.

Quickly we've identified two significant problems to overcome so instead of battling against the odds why not simply take them both out of the equation.

If depth increasingly takes away our colour, accept that's what's going to happen and shoot monochrome film. In doing so you may indeed change the entire mood of a typical shipwreck into a sense of reality not to mention dropping the stress of hunting for the colour itself. Professional land photographers regard monochrome work as their true integrity, underwater the reverse is perhaps more realistic, but many will agree black & white certainly has its place.

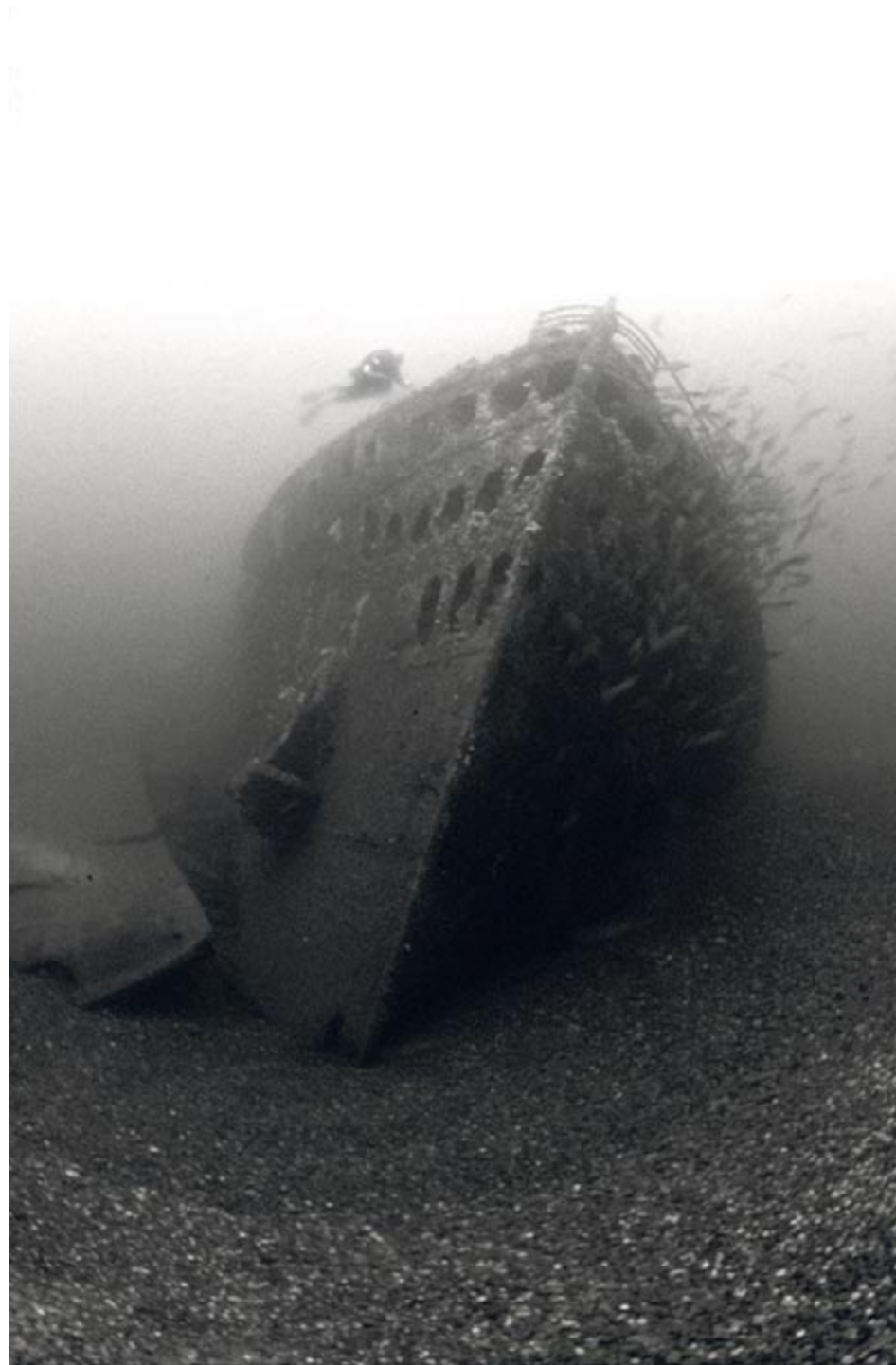
For me capturing huge sections of shipwreck in deeper waters has proved to be a meaningful test, flash photography simply wasn't going to happen. In order to capture the large sections on film meant backing off some distance to fill the lens appropriately; even with a large guide number the strobes were just not powerful enough. Like the colour it was also time now to remove the strobes from the equation, natural light and long exposure photography appeared to be the way forward. The world of ultra fast films and an entirely different concept of exposure now followed me like a black cloud but the biggest question was 'Would the north Atlantic diving conditions open a window and let me try them out?'

The great majority of deep wrecks

Port bow of the Justicia, manual exposure metering with Agfa Scala 200x slide film pushed to 1600 ISO, exposure f16-10sec minus one exposure value.

I photograph are blessed in complete darkness with no available natural light. I had especially discovered this when I had travelled to the English Channel to photograph shipwrecks. Having said that there are the odd occasions when a friend or boat captain calls with news of brilliant visibility, which in turn means clean waters, fingers crossed a midday dive with the sun at its highest and the available light window is all of a sudden open.

When considering the photography of big sections if not entire wrecks a wide angle lens is top of the list, the wider the better, after all we still have to reduce the column of water and tuck in as close to the wreck as possible. We are also looking for some serious depth of field to capture the distance so small apertures down to f22 are also on the cards. Small apertures in conjunction with low light levels means longer shutter speeds the knock on effect of this nasty little chain equals picture blur due to movement and camera shake. It couldn't be simple could it! No taking something out of the equation had to be substituted for another and in this case a tripod was the answer. Introducing





Using black & white film with colourless subjects such as this tank draws out detail where colour simply would not work.

Even at 69m a high sun has given enough light to freeze the fish beside the prop, f11-2sec Agfa pushed to 1600 ISO



a tripod to the deep wreck diving community was asking for a laugh at my expense, I was going to have to bite my lip. Using a Nikon F90x in an Aquatica housing all I had to do was design an adapter that would easily slot into a tripod shoe. Some simple machining and the job was done; attached to a heavy-duty Velbon video tripod I was now ready to capture some interesting effects.

An opportunity to return to the north Atlantic for a number of weeks was too good to turn down; all I had to do was work as hard as I could alongside the crew aboard the expedition vessel Loyal Watcher. In return for my efforts I would have

the opportunity to dive some of the most fabulous wrecks in the world as well as testing the tripod approach.

The question of film is again a subject in itself, although my choice was considerably narrowed down in the fact that I wanted slide format to represent my work in presentation format. Monochrome slide film is a little on the rare side, after some research Agfa Scala 200x was as good a choice as any, a professional variable speed film that could be pushed or pulled between 100 & 1600 iso. I had discussed the concept of which film to use with American shipwreck author and photographer Brad

Sheard. Brad strongly recommended Kodak Tmax a fast 3200 speed mono print film although expressed its sole intention was for use without a tripod, its ultra fast speed would allow hand held use at around 1/30 sec on a wide open lens. Under normal circumstances if a tripod is to be used a slower film is definitely in order, but this was an experiment to capture deep wreck images with great depth of field so anything was worth a try.

One of the key secrets of this type of photography is almost certainly composition. Previous exploration of a site and knowing exactly what image you intend to capture before



The camera housing has been modified to work with a tripod underwater.



Working with divers and long time exposures is perhaps the most difficult part of time exposure photography here the diver has paused to see the guns for himself and the opportunity of a 4 sec period was all that was needed to work the image. Kodak Tmax p3200 print film 5 seconds F16

entering the water can be a great help in composition. Not all subjects however are suitable for ambient light photography, big wrecks as in my quest, objects located close to the surface and ones of high contrast

are considered the best options. Any subjects that do not stand against its background should inevitably be avoided.

Accurately estimating exposure variations even deciding which part

of the scene to meter is probably the most difficult task in this type of photography. There are so many variables affecting light levels at depth, without considerable experience you cannot precisely guess

the amount of light reaching your subject. In order to acknowledge the problem many cameras have built in light meters that even automatically measure light level and adjust camera settings accordingly. Keep in mind that

light meters average the value of all light they see. Based on that average they offer suggested settings (f-stop/shutter speed combinations), all of which result in the same exposure.

Overcome the situation of unsure exposure metering by bracketing, shoot several frames at slightly different exposure settings with the optimum image being singled out on later development. Now equipped with a rebreather the depths I was shooting film in posed no significant pressure to the dive itself. This was a huge benefit as I could effectively concentrate solely on creating images; I had all the time in the world. Once I had found my subject matter of question depending on its potential value as an end image determined what bracketing would essentially be carried out. The very first of a set of frames would be shot using Aperture priority a function to SLR systems that gives ideal control over depth of field. After deciding the Aperture required the cameras sophisticated microcomputer then automatically selects a corresponding shutter speed to give what it believes to be the correct exposure. As I was searching for detailed images with great depth of field this seemed an appropriate way to start a bracketing set and gave early indications of an average exposure the conditions on the day required. After three frames ranging from f11-f22 the systems controls were then changed totally to manual where the electronic analog display within the viewfinder could be used to determine the exposures. Once again a small aperture was selected although this time the shutter speed was also adjusted until it corresponded with what the electronic analog requested as the perfect exposure. In theory the long exposure determined



Sherman tanks on the Empire Heritage. The smallest aperture possible captured the depth of field, and the 10sec exposure has blurred the fish

was exactly what the cameras computer requested in aperture priority mode, mental notes were taken to see if the functions worked simultaneously in the given conditions. Results showed that the exposures in both modes were exceptional and what I was looking for. Adjusting the shutter speed 1 or 2 exposure values either way over-rode what the microcomputer wanted giving an over or under exposed shot which often produced interesting

silhouette effects depending on the conditions and camera angle. All the metering undertaken with the long exposures was in conjunction with the field proven 3d matrix system obtained through an eight-segment sensor and the AF Nikkor lens itself. The system takes into consideration scene contrast, scene brightness and subject-to-camera distance; the result in this situation was an optimum exposure for each frame even in the complex lighting situations



Remaining film after a dive can be used to capture effective mono images of divers decompressing. Here aperture-priority was chosen over manual for fast results to avoid buoyancy problems, using f16 at 1000th sec

I was throwing at the camera. If after my dive I had frames left on the roll I would switch again to aperture priority on the ascent and look for Silhouette images of my colleagues decompressing. Again a combination of Apertures gave interesting effects against the sun using monochrome film; aperture priority was the easiest to shoot in this situation taking the effort of continuously rotating the speed dial while monitoring bouancy as often the shutter speed rose well above 1000th of a sec. At the depths I was shooting film the cameras

microcomputer asked for exposures ranging from approx 4 seconds right through to a whopping 25 sec's. 25 seconds was enough time for me to relax behind the tripod and actually monitor for a change what my rebreather's computer was asking. Of course the long exposures were only problematic when I was working with a diver as scale within the scene, fin movement was inevitable as was trailing light beams. Only the lowest exposures with the camera angle in coordination with the diver produced expectable images, but having said

that the divers where like gifts in comparison to fish! Acting like a screaming break-dancer behind the tripod often prevented fish from entering the field of view during an exposure. The only fall back to this was the fact I was using a rebreather and there was always a chance that a passing colleague may mistake me for someone having an oxygen convulsion.

Large shoals of fish already present in a subject scene blatantly being there first refused to budge which in turn resulted in either an interestingly busy image or simply one for the bin. Whether my images produced using these methods were acceptable in expert fields is debatable, the interest never the less has been overwhelming which is a


result as these images are taken for everyone to see deep shipwrecks as I see them.

Leigh Bishop

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Shark Movement

By Alexander Mustard

Underwater photographers are a fashion conscious bunch. A quick glance around any dive boat will tell you who is in and who is out. The latest and greatest camera and housing will always attract envious glances, but being cool has always been about appearing not to care. So you will always get far more kudos if you strut on board with a Calypsophot slung jauntily around your neck!

The other area we see strong fashions is in the places we choose to take our pictures. Five to ten years ago, the trend was for the tiny, resulting in photographers searching critter capitols like Lembeh, PNG and Mabul for the increasingly weird and miniscule. Of course, these places still remain popular, but the 'in crowd' has now moved on. These days the fashion conscious among you will know that big is the new small.

For the last couple of years sharks have been in and the bigger the better. Photographers have been flocking to fashionable locales like Guadalupe Island, Gansbaai and the Northern Bahamas to shoot large species including the great white shark (although cool folk drop the great), the tiger shark and the great hammerhead. Less than 10 years ago photos of these species were rare, but these days it seems everyone has done the trip, got the T-Shirt and got the shots.

This was a cause of concern for me because I hadn't. Clearly I had to get a bit more fashion-conscious. But being a bit behind the times I find that by the time I finally get to one of these locations all the shots have already been taken!



The advantage of front curtain is that it allows you to accurately compose your subject because you know exactly where it will be in the frame when the flash fires. Nikon D2X + 17-35mm @ 22mm. Subal. 1/15th @ F10. Aperture priority, compensated -1.0. 2 x Subtronic Alphas fired on front curtain.

Been there, got the shots and T-shirt. Big sharks are definitely en vogue for underwater photographers, as this Guadalupe garment snapped on my Bahamian shark trip attests! Nikon D2X + 17-35mm. 1/125th @ F4.



This problem became a reality for me once again in March when I got my first taste of big shark diving on Wetpixel's shark trip to the Bahamas with Jim Abernethy's Scuba Adventures. My solution was to spend the week trying all sorts of in-camera trickery to create some images that may not be any better than those that have already been taken but hopefully offer something a little different. I tried many techniques during the week, but the ones I want to write about here are long exposures.

OK, long exposures with sharks aren't that original these days - my inspiration for this approach came from, UwP contributor, Tobi Bernhard's movement blurred reef shark shot that was the overall winner of the Wildlife Photographer of the Year Competition in 2001. I believe that movement helps shark images for two reasons: first it creates a dramatic atmosphere, which compliments the exciting subject matter, and second the interesting movement patterns add interesting texture to the image, which given the

subject matter can often lack in the colour department. To create movement I used three approaches: rear curtain flash, front curtain flash with panning and also long exposures without flash, using filters. All have their advantages and their place...

Rear Curtain

This is the traditional approach with moving subjects and long exposures. Rear or second curtain flash synch basically means that our strobes fire at the end of the exposure.

To understand why rear curtain flash is effective at creating movement it can be helpful to visualise the process of taking the image. Imagine a shark is swimming past. We press the shutter and keep the camera still, the shark moves across the frame, creating a blurry trail, and then at the end of the exposure our strobe fires creating a sharp image of the shark on the same frame. Rear curtain synch ensures that the sharp image of the shark is in front of the blurred image creating a sense of movement

– showing where the shark has just been. Front curtain synch does not work in this case because the sharp flash-lit image of the shark is created first – so the blur extends in front of the shark – making it look as if it was swimming backwards!

Slow shutter speeds are crucial in creating pleasing movement blur in rear curtain images and I find the best results come with shutter speeds between 1/30th sec down to 1/10th sec, although you can go slower still – the tiger shark image featured in this article was taken at 1/4 sec. The exact shutter speed you will need depends on the amount of blurring you want (more blur requires longer exposures), the lens you are using (wider lenses need longer exposures) and the speed the subject is moving (fast moving subjects need shorter exposures). Framing the subject at exposures greater than 1/8th sec does start to become something of a lottery because once you have pressed the shutter the subject may move considerably before it is frozen by the strobe.



The sense of movement adds a bit of drama to an otherwise standard Lemon Shark image. Nikon D2X + 10.5mm. Subal. 1/15th @ F20. Aperture priority, compensated -0.7. 2 x Subtronic Alphas fired on rear curtain.

One of the major obstacles of getting effective rear curtain shots is in bright tropical waters is being able to use such slow shutter speeds without overexposing the image. You can help matters by waiting for overcast conditions to shoot long exposures, or shooting early in the morning or late in the day. I often find that I still need to use very small apertures to achieve pleasing results (many of the shots here were taken at F16-F22). As a consequence

you will need quite powerful strobes to achieve adequate flash fill, or at least a cooperative subject that will come close to the lens!

Front Curtain

The main reason I use front curtain (or first curtain) synch for long exposures is that it allows me to compose images very accurately as the strobe-lit sharp portion of the exposure is produced immediately after the shutter



The streaking bubbles created by the bait that this Tiger Shark was chasing add an unusual texture to this image. Nikon D2X + 10.5mm. Subal. 1/4 @ F20. Aperture priority, compensated -0.7. 2 x Subtronic Alphas fired on rear curtain.

is pressed. So it looks exactly as it did through the viewfinder. The problem with front curtain is that it has the effect of making the subject look like it is swimming backwards – because the blur extends forward from the sharp portion of the image. To overcome this problem we need to use panning.

I favour two techniques – one is to try to pan exactly with the subject – so it remains sharp and the background blurs. The type of background makes a big difference to the success of this type of shot.

The background needs to have quite a bit of detail in order to show the blur. Open water and featureless sand are not suited to this technique. The second approach is to pan faster than the subject. This produces a similar looking effect to rear curtain synch – where the subject blur extends backwards from the subject.

The accelerated panning technique is probably my favourite way to shoot blurred subjects for three reasons. First front curtain synch means I can compose the image exactly as I want. Second because of



This image was shot without blur and then the blur added in Photoshop (using Filter>Blur>Motion_Blur). In terms of the end result, blur is much more easily controlled with this method, but I feel the images lack that organic feel of doing it for real. But can you really tell? Nikon D2X + 10.5mm. Subal. 1/40th @ F14. Aperture priority, compensated -1.3. 2 x Subtronic Alphas.

the faster panning, blur can be created at faster shutter speeds, which means less of need for small apertures and high power strobes. And finally this technique can be used with slow moving and even static subjects!

Filters

The final technique I tried for creating blurred shark images in the Bahamas was just shooting long exposures without flash (using a filter

to restore the colour). This technique actually requires much shorter exposures than the strobe techniques, because without the strobe light there is no sharp element to provide a focal point amongst the blur, and generally I got the best results between 1/45th and 1/20th sec. I also think that blurred images taken with filters are generally less effective than strobe lit shots for the same reason.



Filters create a different effect because without flash there is no sharp element in the exposure. Here I was trying to create an image that captured the drama of diver encountering a shark. I think that the movement helps generate this feeling. Nikon D2X + 12-24mm @ 17mm. Subal. 1/30th @ F8. Aperture priority. Magic Filter.

In summary I'd say that the different techniques are different tools and give different looks. With rear curtain if you don't pan you get a non-blurred background and trail from the shark. If you do pan with the shark you get blurred background and no trails (and this is the same on both front and rear curtain). On front curtain to get trails going backwards if you don't pan, so you have to pan faster than the subject. As a result you get a blurred background too – unlike standard rear curtain.

In conclusion I certainly feel that movement blur is a very suitable technique for shark photography and it is well worth experimenting with both the standard rear curtain and the front curtain accelerated panning techniques during a couple of (cloudy weather) dives on any fashionable shark trip.

Alex Mustard
www.amustard.com

Conclusion

I think that the obvious question on many of your minds is why bother with these in camera techniques at all, when blur can be added so easily to an image in Photoshop. It is a good question and one that is hard to counter. One point is that you don't get the fun of achieving it in camera. And the other is that there is something more organic, more realistic (but at the same time pretty intangible) about the slightly rough edges that come from creating the blur in camera. But these are hardly definitive arguments.

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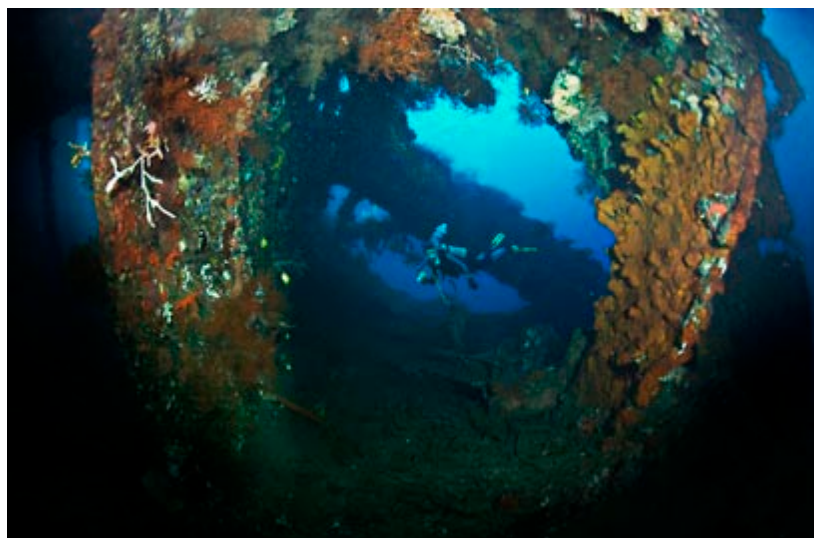
The picture on the left was taken with accessories costing around \$3000 (2 x Subtronic Alpha strobes, sync cords and Ultralight arms). The picture on the right was taken with available light only and a \$30 Magic filter, it's all you need!

Diving Bali's North-East

By Mathieu Meur

Bali is generally not perceived as a dive destination in itself. Divers who head there for its beaches, mountains, parties or handicraft often discover its amazing underwater scenery by chance, and get at best a couple of dives in before having to head back home.

Considering the wealth of Bali's reefs, this means missing out on some of the best dive sites around Asia. Bali is a rather large island with numerous possibilities in terms of diving such as Nusa Penida in the South and Secret Bay to the West. Unfortunately, due to its large size and busy, narrow roadways, travelling from the main area of activities to dive sites takes a considerable amount of time. One of the richest and most varied areas is located in the North-east, near the village of Tulamben. In order to make the most of dive opportunities, and avoid long hours of road travel, it is best to stay at a dive resort there.



A diver visits accessible areas inside the famous Liberty Wreck (Nikon D1X, Nikkor 10.5mm, F2.8, 1/320s, ISO 125, 2xIkelite strobes)

The Liberty

The small village of Tulamben is home to the Liberty Wreck, undoubtedly one of Bali's best-known dive sites, and a world-class wreck, by any standard. It is a must-see for all divers visiting Bali. Dating back to the early part of the 20th Century, the Liberty sank during WWII under Japanese assault. Now some 60-odd years later, the sea has reclaimed this wreck, with lush coral and sponge growths covering its hull, a large density of schooling fish

seeking refuge in and around it, and a plethora of small critters hiding in cracks and recesses. Photo opportunities are diverse and plentiful, warranting several dives to make the most of it. Fisheye lenses will do great here to capture the wreck and its larger visitors, which include bumphead parrotfish, schools of surgeonfish and snapper, sweetlip, preying trevally and barracuda, while a macro lens will allow you to capture its smaller inhabitants, such as pygmy seahorse, shrimps and porcelain crabs. To make the most of this dive site, it's best to book your accommodation



Bali's reefs are rich in marine life with healthy corals. (Nikon D1X, Nikkor 10.5mm, F7.1, 1/125s, ISO 125, 2xIkelite strobes)

nearby so as to beat the crowd with an early morning or a night dive.

Tulamben Drop-off

Just a stone throw from the Liberty is the Tulamben drop-off. The dive start on a black sandy slope, which turns into a vertical wall covered with large sea fans, sponges, healthy corals, and colourful ascidians. But the main attraction of this dive actually unfolds out in the blue, where schools of fusiliers vie for attention with snappers. On a good day, you'll encounter trevally, Napoleon wrasse, and may also catch a glimpse of blacktip or whitetip sharks. Although this dive has potential for both macro and wide-angle photo opportunities, the latter certainly offers the most interest, in particular the sea fans and the pelagic action.



Seraya Secrets

On a totally different note, the shore dive site commonly known as Seraya Secrets, located immediately

in front of the Scuba Seraya Resort, offers an amazing array of macro subjects. This site easily competes with some of the better-known muck diving locations. It is

home to a host of critters that are considered rare anywhere, but can predictably be found there, such as harlequin shrimps, ghost pipefish, thorny seahorse, frogfish,



(Left) A moray getting cleaned by a couple of shrimps at Batu Kelebit (Nikon D1X, Nikkor 60mm, F13 1/200s, ISO 125, 2xIkelite strobes)

(Above) Rarely seen at most dive sites, several harlequin shrimps can predictably be observed at Seraya Secrets. Seen here feeding on the arm of a sea star (Nikon D100, Sigma 150mm, F9, 1/180s, ISO 200, 2xInon strobes)

and the list goes on. Macro lenses are a must here. Having dived it time after time, it's safe for me to say that you'll always find something different and unusual on every dive. On one dive, this could be rare nudibranchs, which are abundant here. On the next, it could be purple commensal urchin shrimps. In fact, the day dives were so good that I eventually accepted the invitation of the dive guides to go for a night dive... and kicked myself for not accepting earlier. At night, it seems that the richness of this site is multiplied by 10, as if that was possible. A host of colourful crustaceans can be seen everywhere, ranging from crinoid, to bumblebee, cleaner, and hinge-beak shrimps. All sorts of crabs can be seen roaming the sandy bottom, such as spider, decorator, sponge, and boxer crabs. Lionfish and moray eels are also on the prowl, hunting for dinner, as are Spanish dancers, seashells and flatworms. The abundance of potential subjects will surprise even the most seasoned photographer, and since it is relatively shallow extended dives are commonplace here. This site has to be one of the best muck dives anywhere!

Paradise

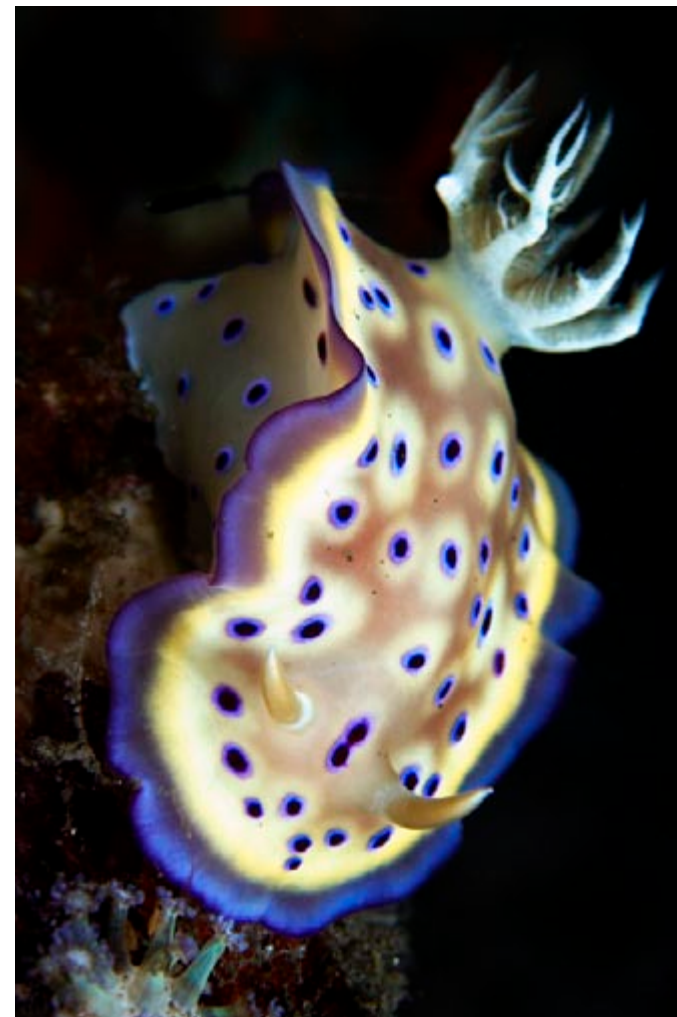
Located in front of Paradise Restaurant, in Tulamben Bay, this shallow dive site is perfect for a long, relaxed dive, hunting for small subjects hiding on the rocky bottom. The latter is covered with polished black pebbles in which squat lobster, crabs, shrimps, nudibranchs and other critters seek refuge. While reef fishes are abundant too, the focus is clearly on macro subjects here. This is the sort of dive site where it pays off to be patient and move slowly, waiting for crustaceans and other animals to appear. Here again, a macro set-up is a must-have.



Crinoid shrimps mimicking their host can be seen all over Seraya Secrets (Nikon D100, Nikkor 60mm, F22, 1/160s, ISO 200, 2xInon strobes)

Kubu

Located a short distance to the West of the Liberty Wreck, Kubu offers a dense, healthy coral cover and a rich fauna, just like most of the reef sites around Bali's North-east. The dive starts off



Nudibranchs can be seen on most dive sites around Bali, but are particularly abundant at Seraya Secrets (Nikon D100, Nikkor 60mm, F16, 1/160s, ISO 200, 2xInon strobes)

on a black sandy slope with sparse, large coral bommies. These are covered with soft and hard corals, sponges, hydroids and ascidians, and are home to a plethora of reef fishes. The sand soon



There's a host of tiny critters waiting to be photographed, such as this unusual yellow coral shrimp at Seraya Secrets (Nikon D100, Nikkor 60mm + 2x Teleconverter, F14, 1/160s, ISO 200, 2xInon strobes)

disappears and turns into large fields of algae, soft corals and hard corals, where angelfish, butterflyfish and other common tropical fish reside. It's good to keep an eye out on the open, as whitetip sharks and other pelagic species are often observed there, especially when current is present. It's best to select a wide-angle or fisheye lens for this site.



The sun sets on Agung, Bali's volcano.

Batu Niti

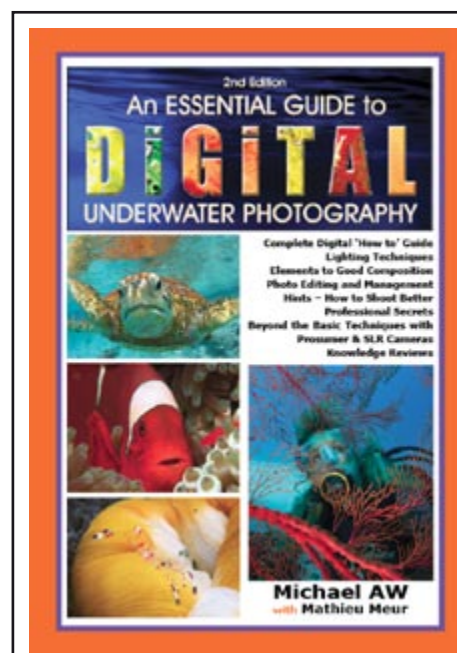
Batu Niti is located about 15 minutes by speedboat from Tulamben Bay. The gentle slope of Batu Niti offers opportunities for anything from deep dives to extended shallow dives. Massive barrel sponges line up the deeper portion of this site, while trevally and barracuda can be seen in the open water. The marine fauna on the slope itself is composed of typical tropical reef fishes, pufferfish, lionfish, octopus, as well as mantis shrimp. Portrait and wide-angle lenses will do well here. For those with a taste for extreme macro, ghost shrimps can be found on most hydroids. Be ready to strain your eyes, though, as these shrimps are really small, and blend in perfectly with their host.

Final Words

The description of these few sites gives but a glimpse of the richness and diversity of dive sites around Bali's North-east. Most sites offer an incredible cover and variety of corals, paired with a dense fish and invertebrate population. This warrants planning a trip there purely for diving. The pace of life in Bali is pretty laid back, so digital photographers will have plenty of time to download and review pictures between dives, while lazing around the pool of their private bungalow. Best of all, although Bali is a relatively affordable destination easily reached from regional hubs, few divers actually make their way

there, which means dive sites are not crowded. Underwater photographers tired of waiting for their turn at photographing subjects will certainly appreciate this.

Mathieu Meur
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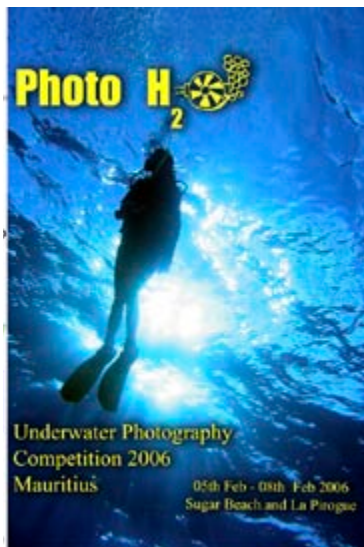
Mauritius 2nd Underwater Photo Competition

By Mathieu Meur

Held over 4 days in early February 2006, the 2nd Mauritius Underwater Photo Competition, Photo H2O, gathered 15 participants from 3 countries at La Pirogue and Sugar Beach Hotels, in the scenic Southwest of Mauritius.

Organised by One&Only Resorts and Sun Divers for the second year running, the competition was held under the watchful eyes of 5 international judges, including world-renowned photographers Henri Eskenazi, Hugues Vitry and Mathieu Meur, as well as editors of dive publications Steve Weinman and Fiona McIntosh. The overall event was extremely well organised, always keeping safety in mind (each photographer was paired with a non-photographer buddy), and with a plethora of fantastic prizes including Air Mauritius tickets, One&Only hotel stays and dive equipments from Saekodive, Scubapro and Inon, amongst others.

Having been involved with the first edition of this competition, it was interesting for me to see that although most participants used consumer or prosumer cameras with slave strobe units,



*First prize winner in Animals of the Reef category
(Photo by Jean-Michel Langlois, Fuji F10 with Inon D2000 strobe)*

the general quality of the pictures showed much improvement this time round. In fact, the overall winner of the competition, Jean-Michel Langlois carried a simple point-and-shoot Fuji camera, with an external strobe. This goes to show that with a keen eye for composition and with creative use of light in mind, one can achieve interesting results even with the simplest camera set-up.



*First prize winner in Beauty of the Sea category
(Photo by Jean-Michel Langlois, Fuji F10 with Inon D2000 strobe)*

Photo H2O aims at becoming an even more international event in years to come, with more participants joining in the fun. If you're interested in taking part, contact Gérald Rambert of Sun Divers

aquabix01@yahoo.co.uk

Muck and Macro

by Mark Webster

As underwater photographers we are constantly looking for exciting new subjects or perhaps new ways of photographing old and familiar ones. The change to digital for many of us also means revisiting many subjects that we have previously recorded on film and maybe experiment with some different techniques which digital allows.

Anyone who loves macro photography will be familiar with the treasure trove of amazing subjects that the Lembah Straits offers. There is so much variety here that it is impossible to record everything in one visit and it seems that new species are regularly being discovered each year. Amongst this variety are also the 'prized species' which are perhaps rare or extremely difficult to find - these become like the Holy Grail to many photographers and will lure us back in the hope of striking lucky next time.

For my most recent trip to Lembah I had a fairly short hit list of such subjects and also the desire to take digital images of subjects I had shot before. In the past couple of years the choice of diving bases



(Above) Flambouyant cuttle fish feeding - Nikon D100, L&M Titan housing, 105mm macro, Inon quad flash, 200ASA f11 @ 125

(Top right) Mimic octopus as a starfish - Nikon D100, L&M Titan housing, 60mm macro, Inon quad flash, 200ASA f11 @ 30

(Bottom right) Bangai cardinal fish - Nikon D100, L&M Titan housing, 60mm macro, Inon quad flash, 200ASA f11 @ 125



has increased in Lembah to include three resorts (with more planned or under construction) and live aboards. My choice for this trip was Lembah Resort, one of the newest and perhaps the most luxurious, on the shores of Lembah Island itself. Individual cottages are cut into the hillside affording spectacular views across the straits and just a few steps away from the dive centre and a small sheltered

bay where the dive boats are moored. One significant requirement that digital imposes upon us is the need to constantly keep batteries on charge for power hungry cameras and strobes, which are now typically exposing a hundred or more images in a dive. The centre here has a large camera room which is well equipped to cope with this - individual camera preparation bays with regulated 110/220v power

and masses of storage room for camera cases etc. The cottages also have plenty of 220v sockets and desks to set up a laptop to download and back up those valuable pixels. So pre-dive preparation and post processing is easy and relaxed.

The biggest challenge facing us when diving in Lembeh is probably finding the subjects! Some are very obvious, but the majority are well camouflaged and you need the experienced eye of the dive guides to help you spot and identify the critters - even then it may take you more than one look to realize what you are being shown! The guides at the resort have all been working in the straits for many years (in fact they claim more than 18000 dives between them!) and I found I was spoilt, particularly when I began to discuss the chances of fulfilling the wish list.

Your initial impression when you make your first dive here in the straits on a classic muck site such as 'Hairball' may be disappointment - dark grey sand and accumulations of man's rubbish or vegetation from the shoreline litter the seabed with the occasional outcrop of coral. If you have seen pictures from Lembeh before your arrival you will begin to wonder where all those brightly coloured subjects are? Diving here requires a slightly different mind set to coral reef diving, the most amazing subjects are here but camouflage keeps them hidden until you expose them with your strobe - then most light up with stunning colours. You also have to think small here - there are some larger subjects but Lembeh is predominantly a macro destination and many of your subjects will be shot at half or life size magnification - a 60mm macro lens on a digital or film SLR is the workhorse lens.

Your guide will begin pointing at some seemingly lifeless collection of rope and palm frond



Clown crab - Nikon D100, L&M Titan housing, 60mm macro, Inon quad flash, 200ASA f11 @ 125

which may lead you to question his sanity. They are patient however and will point several times until you finally see the frog fish or inimicus and realization dawns! After a couple of dives your mind adjusts to the environment and you will begin to spot a few things for yourself - this brings a sense of achievement which is often deflated when your guide points to another 'better' subject right beside the one you have found! The diversity on the sand and rubble alone is seemingly endless, but there are also shallow wall reefs and some classic coral reef areas which provide variety and even more hidden subjects.

High on my wish list for this trip were five subjects - a rhinopias scorpion fish, the mimic and 'worderpus' octopus, the Pontohi pigmy seahorse (Hippocampus pontohi) and a truly hairy frog fish. My earlier searches for the latter subject had turned up several versions of the striated frog fish with short or 'cropped' hair, which would satisfy most desires, but I wanted a truly long haired version - I do admit here to being a bit of a frog fish nut.



Rhinopias scorpion fish - Nikon D100, L&M Titan housing, 60mm macro, Inon quad flash, 200ASA f11 @ 125

So on day one my guide Abner says to me "OK, lets do the rhinopias first". How often have we visited prime locations and heard the guides promise a variety of exotic subjects and sightings only to be told after several days "well if only you had been here last week when we saw.....!" So I received this statement with a certain amount of scepticism to temper the potential disappointment. Our dive was at 'TK2' which is volcanic sand slope shelving gently to an large area of broken and dead coral at around 20m depth which had a coating of filamentous purple algae. A short search by Abner was followed by a brief gesticulation with his stainless steel pointer and suddenly I realized that I am gazing at the most gorgeous purple coloured rhinopias scorpion fish, which would probably have remained invisible to me even after hours of searching. I set to work full of excitement and admiration for these guides and exceptionally pleased that I had more than 100 frames to capture this denizen from all angles. Abner of course wanted to show me a variety of



Soft corals on 'California Dreaming' reef - Nikon D100, L&M Titan housing, 12-24mm zoom, Subtronic Minis, 200ASA f8 @ 30

other subjects close by - two giant frog fish, yellow, black and blue stage ribbon eels, scorpion fish and numerous nudibranchs - but I wanted to stay with my rhinopias for fear of losing it if I let it out of my site. I surfaced elated and Abner calmly accepted all my congratulations without emotion - all in a day's work for these guys.

www.uwpmag.com



Juvenile file fish - - Nikon D100, L&M Titan housing, 105mm macro, Inon quad flash, 200ASA f16 @ 125

Cut to day two and dive at Angel's Window which is a pretty coral reef at the mouth of the Lembbeh Straits. Today's promised subject was the Ponto hi pigmy seahorse which is a relatively recent discovery in Indonesia and had only been found in the Lembbeh Straits a few months before my visit. The classic Bargibanti pigmy seahorse is found



View from Lembbeh Resort to Sulawesi

Camera preparation room at Lembbeh Resort



on particular species of seafans, but this species is found amongst the colonies of tiny green sea squirts (cnidarians) that pepper the reef in shallow water. This search took a little longer and when the subject was pointed out to me I really could not see it - these critters are incredibly small, wafer thin and blend perfectly with their host. I could only see

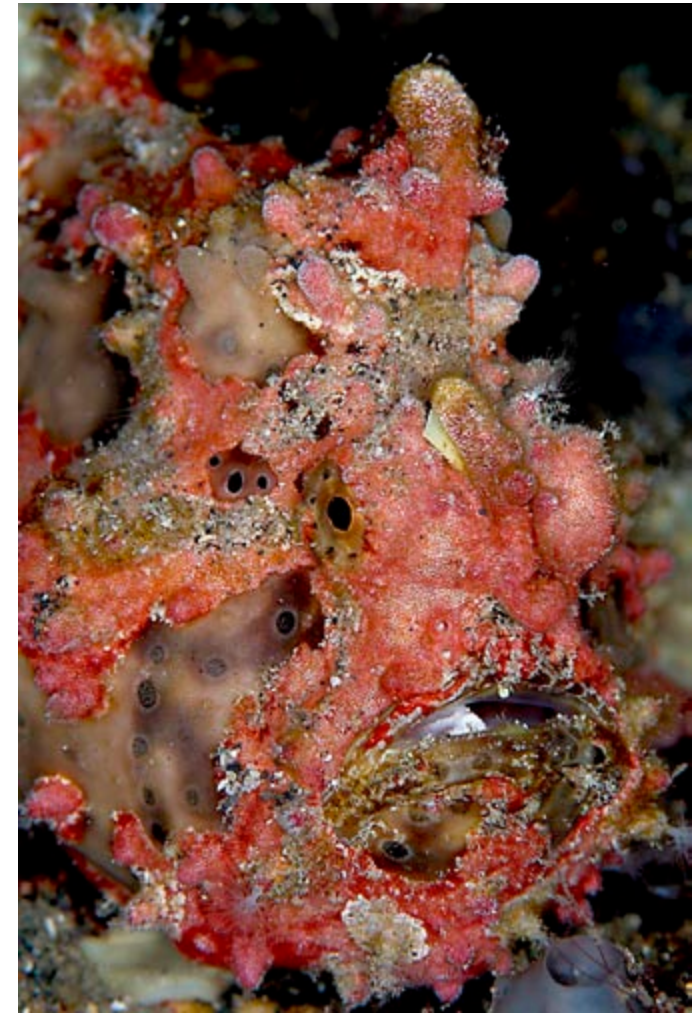
this tiny subject initially by looking through the viewfinder of my D100 which was armed with a 105mm micro lens locked at full magnification and an Inon 2X wet lens on the port. Now I could see it! The next challenge was to keep it in focus as depth of field is minimal and these tiny seahorses are very active constantly twisting, turning and swimming from one sea squirt to another whilst they gulp microscopic plankton. Shooting with a ring flash made life a little easier as I did not need to consider flash position or angle, but from more than 100 exposures I was only really happy with a few, but delighted to have ticked another target from the list.

A change of guide from Abner to Ronald was made for the hairy frogfish hunt. Ronald is something of a frogfish expert and had recently found a species of hairy frogfish that was new to Lembeh. He took me on a longer boat journey to the south of the port of Bitung where we moored in just 3m just above a gentle dark sand slope. The plan was to go to a small reef outcrop at the bottom of the slope where the 'new' mated pair had been seen a few weeks before. Well, we were truly blessed that day - within 5m of commencing our swim from the mooring, way before the slope commenced, Ronald grabbed my hand and pointed frantically at a clump of stringy seaweed. I thought, rather smugly, that I could see the source of his excitement - there was an almost pure white short haired striated frogfish, but it took more than a few seconds to realize that half of the clump of seaweed was a very hairy larger and obviously pregnant female - Yowza! How lucky can you get I thought as I settled in to shoot and would have been happy to have spent the entire dive there. Ronald was having none of it (these were not actually our quarry although I was more than happy!) and marked the location with a stick in the



Whip coral shrimp - Nikon D100, L&M Titan housing, 105mm macro, Inon quad flash, 200ASA f22 @ 125

sand and an old tyre, then led me firmly down the slope in search of the other pair. We reached the target reef patch only to find that the other species had moved on - 'ordinary' frogfish and other gripping subjects were ignored in my anxiety to get back to the other pair which we eventually did and Ronald left me to my own devices.



Warty frog fish - Nikon D100, L&M Titan housing, 60mm macro, Inon quad flash, 200ASA f11 @ 125

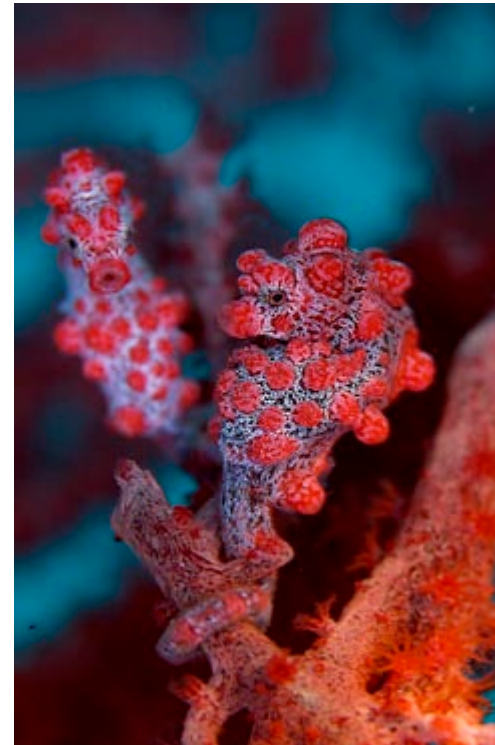
As luck would have it I did not have to wait very long for the next subject on the wish list to appear. Ronald had obviously got bored with watching yet another obsessive photographer shooting a hairy frogfish from every conceivable angle and had wandered off to see what else was about. He returned in a renewed state of excitement



Ambon scorpion fish - Nikon D100, L&M Titan housing, 60mm macro, Inon quad flash, 200ASA f11 @ 125

some while later, fortunately before I had used all the space on my compact flash card. I was reluctant to leave my prize but he was very insistent and led me a 100m or so away to a location he had marked with a 2m steel rod that he carries on every dive. He then motioned me firmly to stay behind him and then began to tap the seabed gently with the rod - I had been wondering what this was for and all was about to be revealed. This tapping went on for several minutes in an area about 1m square - he then stopped suddenly and laid the rod on the seabed. At the far end of the rod

two eyes appeared from the grey sand followed by a spindly zebra striped body and eight arms - this was none other than the 'wonderpus' octopus - I could not believe my luck! The octopus ignored us initially whilst it searched the seabed for the source of the vibration poking its slender arms into every opening in the seabed. I moved in slowly to get some shots and eventually the octopus took an interest in the camera, posing nicely but not really indulging in any significant mimicry. I blatted away until the card was full and then we just enjoyed watching this amazing



Two Bargibanti pygmy seahorses - Nikon D100, L&M Titan housing, 105mm macro, Inon wet lens, Inon quad flash, 200ASA f22 @ 125

creature go about its business of hunting for food - subject number four in the bag!

Our group was larger for the next day and we were spoilt by having the dynamic duo of both Ronald and Abner to spot for us. I stuck with Ronald and the dive went well with a number of interesting subjects including flamboyant cuttle fish, spiny sea horses and a coconut octopus using a jar as a home and a piece of coconut shell as a front door. Towards the end of the dive we could hear a distant tapping from Abner on his tank, indicating he had found a subject

worth our attention. We followed the sound and eventually found the group who seemed at first to be looking at a starfish, but just as I was mentally questioning this, the starfish moved off in the shape of a flat fish - this was actually the infamous mimic octopus which completed my list to perfection. As with the wonderpus, the mimic did not seem concerned by our presence as we formed a loose circle on the seabed - in fact it seemed to be making a visit to each of us to check us out. A great interest was shown in my camera housing which allowed me to get some good close up portrait shots of this amazing creature at it rapidly changed colour and pattern.

All this was achieved in the first few days of my trip which I found astonishing. However, it did also allow me to relax and enjoy the host of other wonderful critters on offer each dive. Every site offers something slightly different and it really is impossible to get bored. You can of course always decide to return to one of your subjects again to improve your shots as most are relatively sessile and only move around a relatively small area. So, yes I returned to perhaps my favourite find of the trip, the purple

rhinopias who had moved a mere 2m from his previous perch, although I would not have found him without my trusty guide - sometimes you cannot get enough of a good thing.

On the flight home at the end of the week I reflected on the success of the visit in terms of the sheer numbers of critters photographed and the astounding luck I had in completing most of my wish list. However, you can never hope to shoot everything you wish for - hmmm, I still need some good images of harlequin shrimps for example.....so I will be back!

Mark Webster

Mark is the author of "The Art and Technique of Underwater Photography" and leads regular overseas workshops.

Mark will be returning to the Lembbeh Straits to host a photo workshop in March 2007 - see his website for details:

www.photec.co.uk

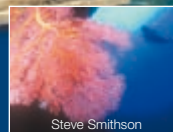
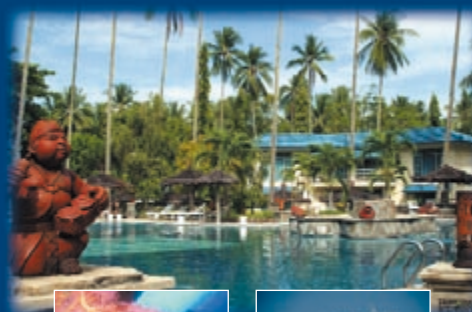


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The sea trees of Trondheim

by Rudolf Svensen

Pictures by Erling Svensen

My 10-litre deco-gas cylinder thumps rhythmically against my hip as I battle the current's efforts to knock me off the wall. Below is the abyss - should I slip and fall I would travel 100m before hitting the bottom.

Ahead I see it, a sea tree, perhaps the first ever to be observed by a diver. Broadside on to the current, it looks like a big fan. It is eating!

On the opposite side of the sea tree Frank Emil has obviously managed to settle on firm ground, because I can see his camera flashing continually.

Sea trees (*Paragorgia arborea*) normally grow to 1-2m, but can reach as much as 6m. These horn corals usually live between 200 and 1300m deep, but we have found the exception, in this shallow habitat in Norway's Trondheimsfjord. Here unique marine conditions allow such corals to grow within reach of divers.

Sea trees are filter-eaters, picking out their food from the water that passes through their polyps. The one we have found has all its polyps out, and there, flower-like eating organs make a beautiful spectacle.

We would have liked to track down some of the numerous marine

creatures that live on such corals, but we have been at 55m and all too soon have to return to the surface.

On our way up we pass orange sea bushes (*Paramuricea placomus*), their flat sides set against the current. These are smaller relatives of the sea tree, corals that form colonies up to 1m in height as far up as 25m from the surface.

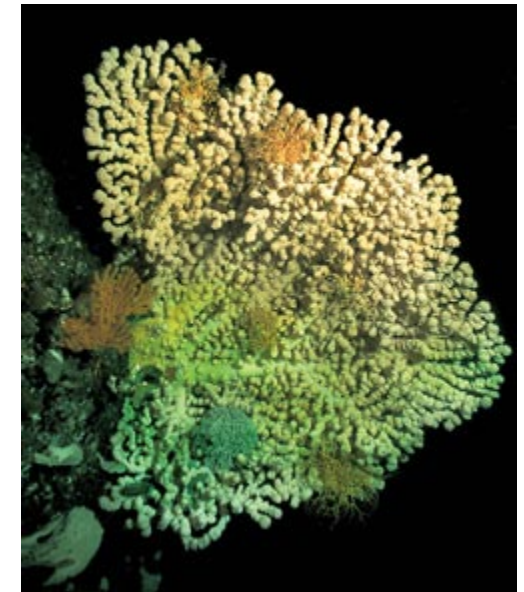
Colonies are shaped like fans and are known to have many lodgers, particularly amphipods and isopods. Six thousand five hundred such small crustaceans have been found on a single sea bush just 35cm high.

We stop at 30m and take pictures of the basket stars sitting on top of a big sea bush. At 9m we exchange breathing gas and begin a 30-minute decompression. A week of diving in Skarnsundet at the head of Trondheimsfjord is about to end.

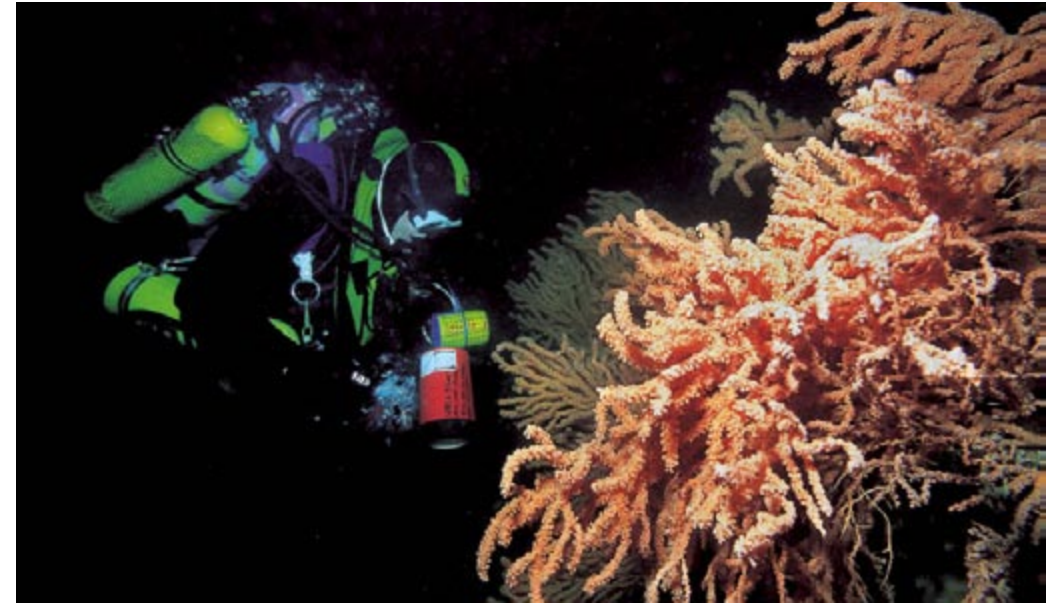
Eight days earlier we had driven 1200km to arrive, loaded down with equipment, in the town of Steinkjer. We had spent more than six months planning this autumn expedition, and besides our photographic and diving equipment we had a compressor, GPS, portable echo-sounder, laptop computer with software for dive



The Trondheimsfjord is the fjord in Norway that receives most freshwater of all fjords in Norway. This provides the best conditions we have for deep water marine life to come up to quite shallow water.



(Left) Paramuricea placomus is a gorgonian coral seen in the fjord below 18 metres. (Right) Paragorgia arborea can grow to 6 metres high, but usual size is 2 metres like this one. It grows approx. 2 cm every year. Pictured at 55 metres. Subal Nikon F90, 14 mm Sigma lens, Hartenberger strobes. Fuji Velvia, F8 1/125th.



*(Left) We have seen ratfish at 8 metres in Trondheimsfjord. They ascend in the late evening and seem to follow krill. Subal Nikon F90, 60 mm Nikkor lens, Hartenberger strobes. Fuji Velvia, F11 1/200th. (Right) Frank Emil Moen with his pony and deco-gas under his arm at 55 metres on Skallen reef with some *Primnoa resedaeformis* corals, only found deeper than 100 metres elsewhere. Subal Nikon F90, 14 mm Sigma lens, Hartenberger strobes. Fuji Velvia, F8 1/125th.*

planning and tide tables, and 15,000 litres of nitrox 80 for decompression.

We planned to use a computer program to set up deco schedules and plan bottom times. Alternative dives would be simulated on the computer before we hit the water, and each diver brought his own collection of diving profiles.

As we had six days of diving (one day off for every three days of diving), we would allow twice as much deco time as necessary on every dive. Even on shallow night dives

down to 20m the plan was to breathe nitrox 80 before ascending.

We hoped not simply to take pictures of sea bushes - which in this part of the world can be found all over the place - not only of the sea tree, but of the ratfish and of no less a phenomenon than a coral reef in Norwegian waters.

The sun set several hours ago. We pad along the pier, fully equipped for diving. After today's earlier meeting with the corals, we are planning to snoop about in the

shallows with our cameras.

Erling and Frank Emil are a few metres ahead of me as we slide down the narrow crevice in the steep cliff. Our lights creep over the rock, where sea cucumbers strive to stand firm in the current.

Just below me at about 16m I see a long, narrow fish sliding into Erling's torchbeam. The next few minutes are chaos.

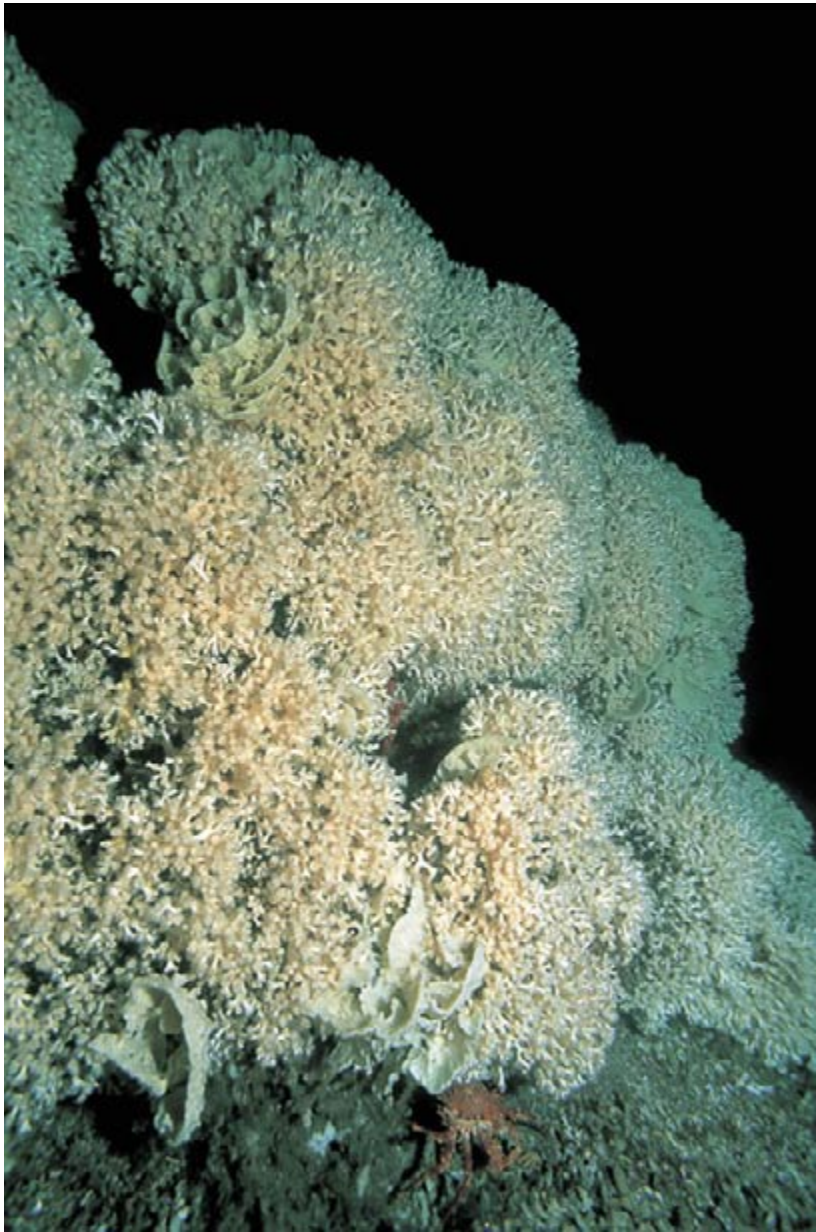
We have found another stray from the deep, a creature we had been curious to see for years - the ratfish, or

sea mouse.

We had seen it before only in illustrations. Its Latin name, *Chimaera monstrosa*, originates from Greek mythology and refers to a fire-breathing goat with a snake's body and a lion's head. Pictures show a creature with big, golden eyes and a whip-like tail.

The others catch sight of the ratfish at the same time as me, but it is not alone - there are five of these "monsters" in the cleft.

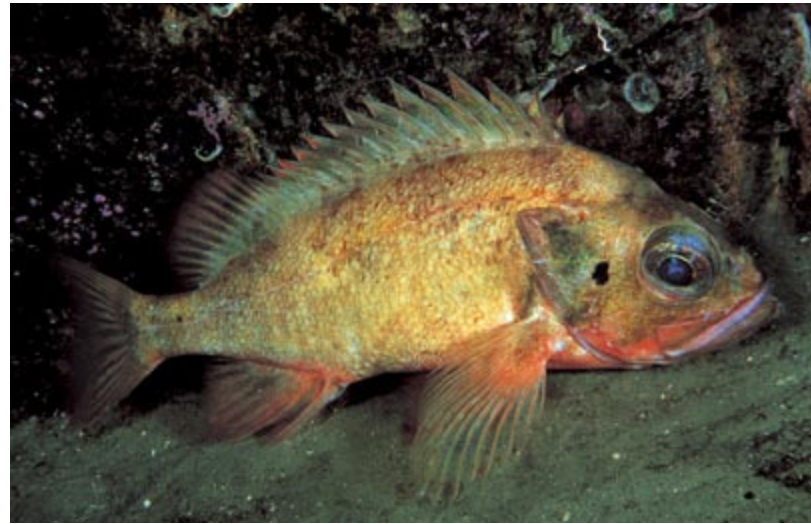
In their efforts to take pictures



while stopping themselves descending, the divers' fins stir up a lot of mud.

Their lights keep

flashing, and I stay above and out of the way until things calm down. The eyes of the ratfish are very sensitive, and



(Left) Lophelia pertusa is a stony reef-building coral and the reef-builder. The shallowest known reef is at 38 metres in Trondheimsfjord. Subal Nikon F90, 14 mm Sigma lens, Hartenberger strobes. Fuji Velvia, F5.6 1/125th..

(Above) The Norway redfish is quite a common sight for divers in Norway. It can grow to 30 cm and can be seen from 10 metres and deeper. Subal Nikon F90, 60 mm Nikkor lens, Hartenberger strobes. Fuji Velvia, F22 1/200th.

the flashes obviously make them uneasy.

Two of them head towards me. Their heads resemble those of dogs, and their big eyes sparkle with green brilliance in the light of my torch.

One comes close and "snuffs" at my camera before turning back down and disappearing. moving with incredible grace.

Suddenly they are all

gone, leaving in the crevice three dazed divers amid clouds of mud. Later in the week we would meet these extraordinary fish several more times.

The sky is bright, and the sea is almost calm. I am sweating as I arrange the equipment, and the excitement in the boat is almost tangible. Have we found it? Soon we will have an answer.

I tumble into the water and slide down the shotline. It is low tide, and there is little current. I need to check that there really is a reef down here. If I cannot find anything near the mooring, I will play out my line and make a circular search out from the shotline.

The computer indicates that I am near the bottom. Expectantly I play my light down into the darkness. A big, white object appears as I land on the dark sand. I identify it as a sponge. As the light sweeps up the slope, I can just make out something else big and white on the edge of the cone. I swim somewhat nervously into the unknown.

I will never forget that swim. Large fan sponges and trees of ricegrain corals (*Primnoa resedaeformis*) surround me, and Norway haddock (*Sebastes viviparus*) hang around in the water. I feel as if I am in some weird, bewitched forest.

These quaint creatures have never before been disturbed by humans. Why should such beauty be hidden under masses of cold, dark water?



The Senopleustes latipes amphipod is common in the corals in the fjord. Subal Nikon F90, 60 mm Nikkor lens, Hartenberger strobes. Fuji Velvia, F22 1/200th.

It really is the Lophelia reef (*Lophelia pertusa*), and not one but three. They are not big; Lophelia reefs of up to 500,000sq m have been found in Norwegian waters, usually on the Continental shelf between 200 and 400m. This one is at 55m. "Our reefs" are no bigger than a VW van, but that doesn't matter. We have found what we were looking for.

Carefully I touch the fragile corals. They are quite hard, like stone corals in warm waters, and the reef reminds me of a thick thornbush. It bears a striking resemblance to shallow tropical coral reefs.

I have hardly time to acknowledge a few shrimps and a couple of troll lobsters before I have to head back to the shotline. On my way back I pick up a small, loose piece of live coral from the bottom. Perhaps it was torn off by a fisherman's jig.

The deco-stops give me time to absorb the

dive, which ranks among the most wonderful experiences of my diving career. I want to go straight back down, but there is plenty of time.

Five days later we leave the reef for the last time. Nothing has changed. The Norway haddock is still hanging in the water, and the coral fans wave goodbye. The six films we have taken on the reef are likely to include pictures of several species never before photographed by divers.

It has been a successful expedition. After only three dives, all our objectives had been achieved - to see the sea tree, ratfish and coral reef.

Diving in Skarnsundet can be very challenging and is not recommended for beginners. We constantly had to fight unpredictable currents, sometimes going in opposite directions along the wall on the same dive. In some places currents also went straight up or down in a wedge-like formation.

The area off Skarnsundet is biologically very interesting and less difficult to dive, but it is still possible to see sea bushes in the relatively shallow and still waters. There are few diveable wrecks in this area, but for anyone interested in marine fauna it is unique. Divers are likely to visit in great numbers in coming years.

Travel by ferry or fly from the UK to Oslo or Bergen, hire a car for the 650km drive to Skarnsundet, or fly on to Vaernes, 80km from the

site. Accommodation is available at Vangshylla Rorbuer at the western end of Skarnsundet, in new cottages that sleep up to six and cost £300 a week. Call Svein Gusta, tel. 00 47 74155641. Boats can be rented locally, air can be obtained from the local fire station or Steinkjer Diving Club 25km away. Viz is best in winter but varies from 0-40m. The water is cold, between 4-7°C at depth, possibly warmer at the surface in summer.

Rudolf Svensen
Photos by Erling Svensen

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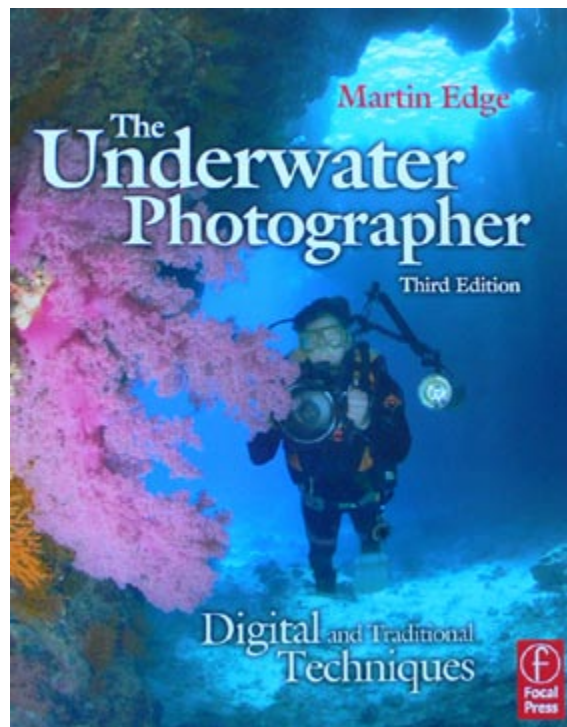
Book Reviews

The Underwater Photographer 3rd Edition by Martin Edge

A new book on underwater photography is always a welcome arrival especially in this digital era when new technology starts the learning curve all over again.

The previous two editions of The Underwater Photographer have earned Martin Edge an international reputation as an excellent tutor and his books have been a major influence on newcomers. This latest edition, whilst still bearing the same name, has been completely rebuilt and expanded to include digital photography underwater. As a result it will cater to film and digital enthusiasts alike.

Unlike other technical books on underwater photography Martin's approach is very personal and he imparts decades of knowledge and experience throughout the book which is well illustrated and attractively laid out. His explanations of the thought process behind many of the shots are



much more enlightening than mere camera settings and it is this kind of delivery which sets Martin's book apart from the rest.

In a fast changing world capable of producing instant results it still pays to understand the basics in order to maximise the quality of your shots. The Underwater Photographer provides all the technical knowledge you need and explains it in an easy to understand manner.

Many books on underwater photography tell you the facts and leave you to get on with it. Martin not only tells you the facts but encourages you to develop your images and

your thought processes in a way no other books do. This makes it the perfect companion for those entering the hobby as well as for the more experienced who are looking for new ways to improve their images.

The Underwater Photographer is a very comprehensive book and I believe it will prove a valuable reference work for many years to come.

www.edgeunderwaterphotography.com

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Diving the World by Beth & Shaun Tierney

This an ambitious title to live up to but in just over 350 pages the authors have managed to cram in a wealth of useful facts and make this a good reference book for anyone visiting a new place for the first time.

Each location is well described with itemised maps and local information not just about diving but also about getting there, language, laws, safety, health and costs together with some useful contact numbers.

The book is well illustrated with a good variety of consistent surface and underwater shots and is attractively laid out with bullet style boxes. There are descriptions of over 220 dive sites from 19 countries to



give you a flavour of what's in store for you when you arrive at your chosen destination.

With such a wide area to cover there must inevitably be some gaps - for example the Caribbean is represented by Belize and Honduras but if you are interested in visiting any of the areas covered in this book it will provide a valuable reference source to make the most out of your visit.

Diving the World is very good value at just £19.95 or \$29.95

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Peter Rowlands
peter@uwpmag.com

www.uwpmag.com

Guidelines for contributors

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

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

Uw photo techniques - Balanced light, composition, etc

Locations - Photo friendly dive sites, countries or liveaboards

Subjects - Anything from whale sharks to nudibranchs in full detail

Equipment reviews - Detailed appraisals of the latest equipment

Personalities - Interviews/features about leading underwater photographers

**If you have an idea for an article,
contact me first before putting pen to paper.**

E mail peter@uwpmag.com

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.

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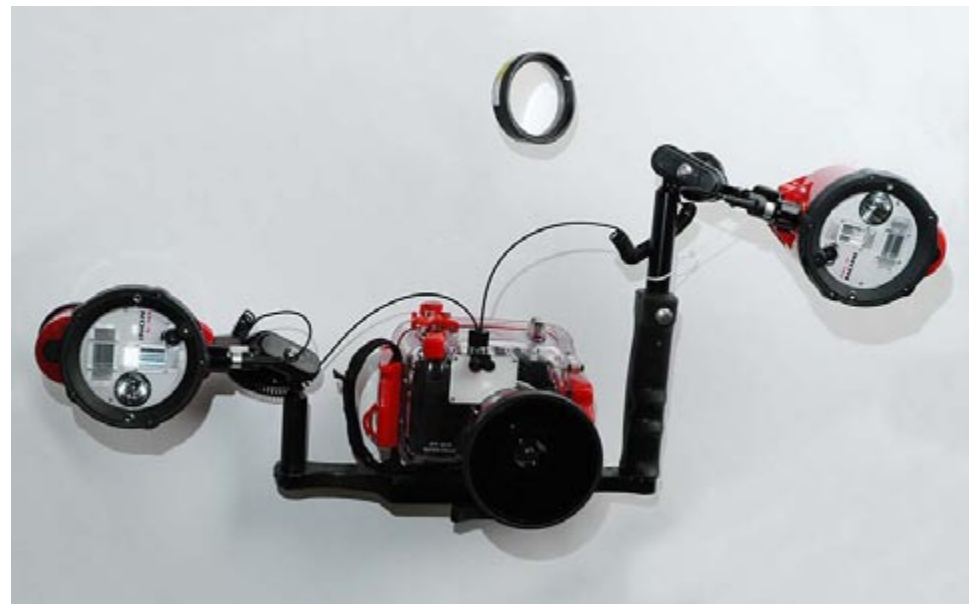
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Olympus 5050 underwater package purchased September 2003 and later includes: Olympus C5050Z Camera, Olympus PT015 underwater housing for Oly 5050, 2 x Inon D180 strobes, Inon optical cables for dual Inon D180 strobes to fit PT015 housing, Customized Ikelite tray for Oly 5050 / PT015, Inon UWL-100 Achroma Wide Conversion Lens, 100 degree view angle, 67mm threaded mount, Inon UCL-330 Close-up Lens, 330mm focal length, 67mm threaded mount, Butterfly clamps to mount strobes

All components in very good condition. US\$1500 plus shipping

dive@gans.co.nz

Parting shot

I took this shot last October in the sea directly off the hypermarket in down-town Manado. I used a Nikon D100 with a 105 macro lens and my MK 1 ringflash. I was shooting RAW files. Half way through the dive my camera began to 'play up'. I had taken 6 or 7 pictures of a lion fish, sitting on the bottom. My attempts were to capture an abstract of the fins and body patterns. My flash went off but nothing appeared in my LCD. I pressed the shutter at random and the camera was locked out. Strange one for me. This had never happened before with my Nikon D100. I turned it off and on repeatedly. I repeated the process with my ringflash on/off switch. I composed and shot anything and everything I saw over a 2 minute period in an attempt to get my kit to work.

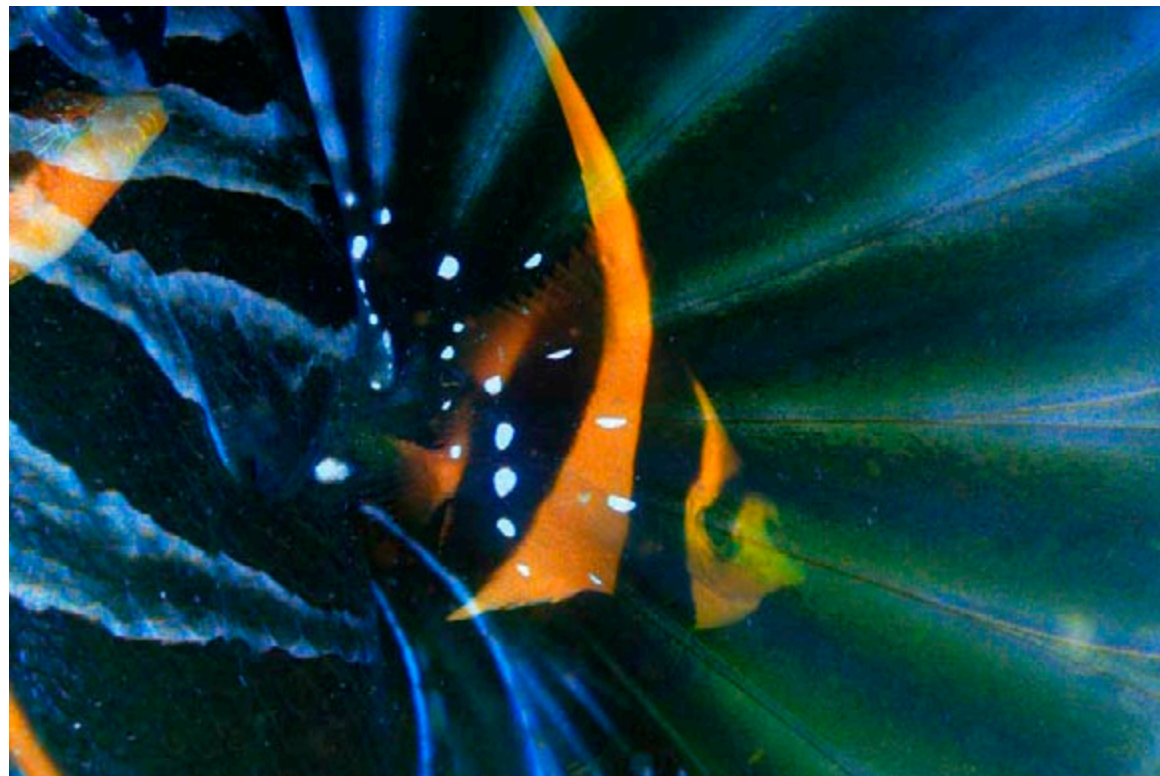
The shutter opened, the flash illuminated. The camera had fired but again, no shot in the LCD. This pattern continued for another 5 minutes. Once again the camera fired but nothing appeared. I was contemplating abandoning the dive for the sole reason of checking the camera for the possibility of a flood when out of the blue or dark grey - An image appeared of its own accord in my LCD.

Fascinating. On the three occasions the camera had tripped the shutter and flash - three composite pictures had been recorded onto the memory card on one frame.

You can clearly see my first shot of the lion fish fins. What appears to be a small cow fish appears at top left and a second subject appears to occupy the bottom right of the frame. There appears to be an orange tinge to the whole frame which I cannot recollect being present in the subjects. To be perfectly honest I cannot remember shooting anything but the fish fins.

The camera continued to work properly for the remainder of the dive trip and never misbehaved again. I have processed the shot in Photoshop CS2 Raw Converter but made a point of leaving everything 'untouched'.

I have no idea whatsoever how this shot came to be but I'm delighted to have it all the same. It's well exposed, sharp, creative and attracts the eye. The composition is balanced and as for camera settings - I was in Manual mode and believe the aperture was set to F11 with a shutter speed



of 180th second. The memory card was clean and had been formatted before the dive. I had taken about 15 shots before the 'problem' which had recorded as normal. When this shot appeared all the others were gone. I left the water with just this shot on the memory card. I have used the card many times since. I have used

the ringflash also and the occurrence continues to be a mystery to me. Any other Nikon D100 users had a similar problem?

Martin Edge

www.edgeunderwaterphotography.com

**Do you have a nice shot with a short story behind it?
If so e mail me and yours could be the next "Parting shot".**

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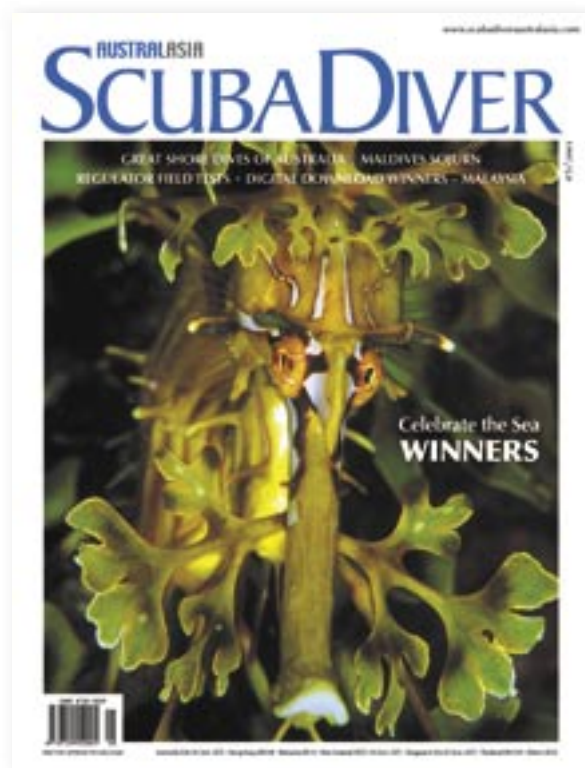


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