# Underwater Photography

a web magazine
May/June 2005

Ikelite Fuji F-810
Nexus Nikon D2x
Epoque EHS-400X
Fantasea CP-6 & 7
Gates Sony FX1/Z1
Sea & Sea VX-FX1
Seacam Fuji S2
Olympus mini Digital
Iceland
Panoramas
Digital techniques
UR Pro SWCY filters
Macro lighting
Cuttlefish
Parting shot


Photo by Alex Mustard

**Click here to go to Alex's review of SWCY filters**

On June 1, 2005, URPRO will introduce the new SWCY optical glass underwater filter. This specialty URPRO filter is designed for color correction in shallow tropical blue green water using natural sunlight only. Based upon Patented and Proven technologies, the SWCY filter is ideal for ALL still, digital, video, and cine imaging systems. (SW = Shallow Water ~ CY = Tropical blue green waters).

IMPORTANT SWCY NOTES

- SWCY filters are available in optical glass only.
- Initial SWCY filter inventory is limited and includes many popular filter sizes.
- Filters NOT in inventory take 4-6 weeks to manufacturer and ship.
- SWCY filters sizes smaller than 37mm are NOT available at this time.
- SWCY Filters can be easily ordered online using www.urprofilters.com.
- All SWCY filter orders will be processed in the order in which they are received NEW FILTER PRICES—check www.urprofilters.com for SWCY filter sizes, prices, and availability.
- IMPORTANT: SWCY filters have the same color and/or visual appearance as the traditional URPRO CY filters. However, these filters are very different and cannot be interchanged. The only way to tell them apart is by the label on the filter ring.

URPRO SWCY FILTER INSTRUCTIONS

**www.urprofilters.com**

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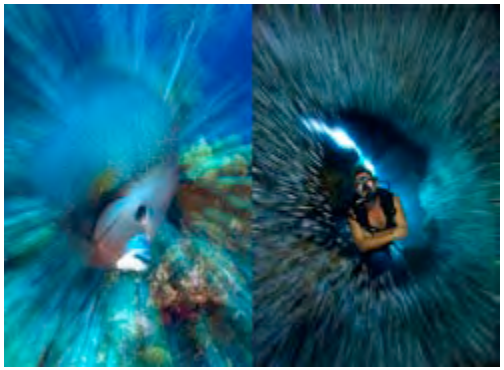

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# Editorial

## Hyperlinks

I'm sure most of you already know but it's worth pointing out again.

Unlike conventional printed magazines, UwP contains 'hyperlinks' which, as their name suggests, when clicked will take you to the website or set up an e mail message. Obviously this will only happen if you are online but with 'always on' broadband connections becoming more affordable you can quickly and conveniently visit the website to get more information.

The hyperlinks are built into every UwP advert and in the editorial they are in blue underlined type. This facility is a very useful way for us and advertisers to gauge the amount of response each issue generates as well as providing you with a quick way to communicate.

Hyperlinks are offered only to our display advertisers so some editorial text will give a website address but no hyperlink. That's because we have given them publicity without them buying a display advert.

UwP can only remain free thanks to the support of our advertisers so it is important that you use the hyperlinks whenever you want.

## Planning UwP

UwP is a remarkable publication in that it is almost unplanned. In the 24 issues since August 2001 I have asked for perhaps 3 or 4 articles to be specially written and the rest have just arrived!

The usual scenario is that a reader e mails me with an idea and if I like the sound of it I ask to see a few low res images and then, if they are suitable, I welcome the submission of an article. 9 times out of ten the ideas and the images are accepted.

One exception was when Tony Wu's fantastic article about the sperm whale together with his superb images (UwP9) simply arrived unannounced in my morning e mail. I think there are still some cornflake remains on the wall, I was so blown away!

I like to keep UwP unplanned because it wouldn't be much fun working on issues months in advance. I like a feeling of spontaneity and most contributors articles are published in the very next issue rather than months down the line.

This particular issue has got more than one article from me because I have been up to quite a bit recently and, to be quite honest, I haven't had many contributions recently!

The other nice thing about UwP is that I get contacted by many excellent underwater photographers offering quality contributions - not with money in mind - just because they want to see their work in UwP. That is most gratifying to receive the support of so many people at the top of their field and long may it continue.

## Diving for photography

Alex Mustard and I went on a last minute trip to the Red Sea recently. He wanted to try out his new Nikon D2x and Subal housing and I wanted to see if panoramas would work underwater.

We joined Snapdragon (an excellent boat, by the way) out of Sharm el Sheik on a normal liveaboard week. By normal I mean a divers rather than underwater photographers trip. We clarified with the boat that we would not have to go on the dive guided tours as we could buddy up and stay shallow but otherwise we stuck to the boat's dive rules - namely maximum dive one hour etc etc.

Because we both had specific things to do this was not a limitation and we were able to achieve everything we set out to do.

Our underwater photographic needs were not that demanding. Alex wanted to get some practice in with his new rig and shooting panoramas is not that time consuming.

On more dedicated underwater photography trips we usually have a number of ideas we want to try out which would involve multiple dives on the same location. A typical divers trip usualy means diving no site more than once (with the possible exception of the Thistlegorm) and this isn't ideal for concentrated underwater photography.

Back in the UK Alex rang me a few days later. He had been checking his log book from a previous underwater photograpers trip and noted that he was in the water for almost double the time because dive times weren't limited and mooring up at the same site for at least a day meant multiple dives off the back of the boat rather than timed RIB dives.

So if you really want to concentrate on your underwater photography it pays to hook up with like minded souls so you can take control of your time underwater.

peter@uwpmag.com

# Readers lives

## In Memoriam - Robert Hunter
### By Captain Paul Watson

My lifelong friend and teacher Robert Lorne Hunter died today, May 2nd 2005.

Bob Hunter was plainly and simply one of the most inspiring and visionary environmentalists of our time. He was "the" founding father of the Greenpeace Foundation.

There are many of us who can be called co-founders of Greenpeace. Like veterans of a long war, we have all been kept aware of each other for three and a half decades. Some remain friends and some are now sworn enemies. But most of us have held, and will forever hold, a special place in our hearts for Bob.

In 1974, Bob took the embers of what we began with (the 1971 voyage to Amchitka to oppose nuclear testing) and he fanned the dying sparks into the flames that gave birth to what is today the International Greenpeace Movement.

The fact is that if there had been no Robert Hunter, there would not today be a Greenpeace organization. It would simply be a footnote in the history books from the early seventies.

In March of 1976, he and I stood on the heaving ice floes off the coast of Labrador as a large sealing ship bore down on us. The ice cracked and split beneath our feet as I said to Bob, "When it splits, I'll jump to the right and you to the left."

Bob looked straight ahead and calmly said, "I'm not going anywhere." And he meant it. And because he stayed, I stayed, we brought that seal killing ship to a dead stop. It was not the first time that Bob and I faced death together and it was not the last.

Bob participated in numerous campaigns with the Sea Shepherd Conservation Society. His last campaign with us was off the coast of Washington State in 1998/99 when we were opposing the killing of whales.

Bob was a courageous man and that courage was present until the end. I had a hard time appreciating the seriousness of his illness over the last year because he was always so upbeat and positive every time I spoke with him.

Robert Hunter leaves behind a legacy – he not only had an idea, he nurtured his idea, and saw it grow to become an international powerhouse within the global environmental community.

Bob was many things: Journalist and author. Philosopher and activist. Television host and media critic. Artist and poet. Husband and father. Friend to the whales and friend to nature.

It was my great privilege to have been his friend for 35 years, to have sailed with him on Greenpeace and Sea Shepherd campaigns. To have spent time with him at the pub. To have known him.

In the year 2000, Time magazine listed us both together as environmental heroes of the 20th Century. We were not, however, equals. He was the teacher and I the student. I have learned a great deal from him.

With his passing the Sea Shepherd Conservation Society loses one of our most valued Advisory Board members. Greenpeace has lost the very Foundation of their organization and the world has lost an environmental icon.

There are very few people in the world who have not heard of Greenpeace. If not for Bob Hunter, the name today would have little meaning.

He was truly the father of Greenpeace and none of us who were his friends, his fellow co-founders, his shipmates, or his fellow eco-warriors can deny his unique and special place as one of the greatest and most visionary ecologists of the 20th Century.

# Ocean Optics

## Ocean Optics and Mavericks Diving. Your One Stop London Dive Centre.

At our new central London showrooms you'll discover only the finest underwater camera equipment. As underwater photographers ourselves, we have the experience to select the products that will help you make great underwater images. And our reputation, built over a quarter of a century, means we never have to offer second best - top designers and manufacturers want us to represent them.

We're exclusive UK agents for Subal, Nexus, Subtronic and Inon, as well as major stockists of Canon, Sony and Olympus housings.But the best equipment is nothing without the best advice.

At Optics we'll never hard sell you or push you to buy something you don't need. It's our passion for honesty and service that's won us the custom of so many of the Uk's top shooters.

Now we're taking those same qualities and applying them to diving equipment. So when you visit Ocean Optics, you'll also have access to superb scuba and freediving kit through our sister company Mavericks Diving Ltd.

Ocean Optics and Mavericks Diving. Your one stop London underwater and recreational diving centre.


Ocean Optics and Mavericks Diving
7 Bush House Arcade, Bush House
Aldwych, London , WC2B 4PA
Tel 020 7240 8193 Fax 020 7240 7938

www.oceanoptics.co.uk

www.mavericksdiving.co.uk

# News, Travel & Events

## Photos Forever


Acoustica Inc. has just released their new simple to use digital photo archiving program - Photos Forever.

Photos Forever has a user friendly interface that is so simple to use, that even the most inexperienced digital camera user will be backing up their most precious memories to a CD or DVD within minutes.

Photos Forever does all the work for you!

It will find your digital image files (JPG, BMP, TIF, PNG and raw formatted photos)?wherever they may be on your computer, prepare them for backup, tell you how many CDs or DVDs you'll need and then proceed to burn them! After each disc is done, a sound chimes to let you know it's ready for the next one. After the discs are created, it will even print out a convenient 'Key' list so that you can reference what picture is on which disc. What could be easier?

Suggested Price: $14.95

www.acoustica.com

## Cameras Underwater in Ocean Leisure, London

Cameras Underwater is delighted to annouce the opening of their new showroom within Ocean Leisure in London. They will be stocking what they believe to be the widest range of underwater camera systems available in Europe with compact housings from;

Canon, Sony, Olympus, Nikon, Pentax, Casio and Fuji as well as our lines from Ikelite, Sea and Sea, Hugyfot, Gates, Ewa Marine, Epoque, Amabilia, Pelican, Aquatech, Greenforce, Niterider, Inon, Ultralight and UR-Pro filters

Cameras Underwater Ltd,
11-14, Northumberland Avenue,
London WC2N 5AQ
Tel. 01404 812277 Fax. 01404 812399
www.camerasunderwater.co.uk

## Florida Dive Show 2-4th December 2005


Come and Experience Sunny South Florida and Escape Winter to the U.S. Premier Florida Dive Show at the Palm Beach County Convention Center this December 2-4th, 2005.

This is the first and hopefully the largest Florida consumer SCUBA dive show all under one roof. With room for over 250 exhibitors in a 50,000 square foot hall, the Florida Dive Show will include equipment demonstrations, travel seminars, technical conferences and much, much more.

Conveniently located in central Palm Beach County, Florida, only three miles from Palm Beach International Airport (PBIA) the Palm Beach Convention Center site is at 650 Okeechobee Blvd.

E mail
Dawn@floridadiveshow.com
www.floridadiveshow.com

## Join Ultralight Control Systems friends and customers at Lembeh Resort October 26 - Nov. 8, 2005

The cost of the trip is $1750 and includes 10 nights in an air conditioned room, double occupancy, 3 meals per day, 27 dives and transfers to and from the Manado airport.

They offer 2 morning dives, one at 2:30 and a night dive daily. Also free of charge is a house reef dive (non-guided) per day.

Any additional dives beyond the 27 will only be $27 per dive.

Airfares to be purchased on your own or ULCS are working with a travel agent for special airfares. Let them know if you need air.

You need to be in Manado on Oct. 28th and will be leaving Manado Nov. 7th .

A night over in the Singapore transit hotel each way will be needed unless they fly the non-stop. Rates at this hotel are about $40 for a block of 6 hours. Nice way to catch up on sleep before diving.

Deposit $200, with balance due July 1st.
E-mail terry@ulcs.com with any questions, deposits being taken now.

**terry@ulcs.com**
Resort info: www.lembehresort.com

## Advanced Digital Red Sea Workshop with Alex Mustard, sponsored by UWP

*Alex Mustard exploring Ras Mohamed last summer. Photo by Peter Rowlands.*

This is a first announcement of our intention to run an advanced digital photography workshop on a North Red Sea liveaboard in early July 2006. Alex Mustard will be leading the trip including giving a series of evening talks on the techniques of digital photography.

Peter Rowlands will also be on board bringing a variety of underwater photography equipment from UWP sponsors for everyone to try. The main aim of this trip will be to provide the best photographer orientated diving (unguided, often repeating the same sites) on the famous wrecks and spectacular reefs of the North Red Sea. The trip is timed to coincide with the large spawning schools of fish that gather at prominent sites such as Ras Mohamed.

We hope that photographers from both North American and Europe will join us and we will offer both London to London and boat only packages. If you are interested in finding out more about this special trip then please email us at peter@uwpmag.com. We would also like to know if you would prefer a one or two week trip.

## Linda Pitkin exhibition at the London Aquarium

The London Aquarium is hosting an exhibition of underwater photography by Linda Pitkin. This exhibition will feature a selection of her stunning images of marine animals and scenes from tropical and temperate waters around the world. Her photography features widely in many media, ranging from books, magazines, and national newspapers, to uses in advertising, and in an IMAX multi-screen presentation. In conjunction with her exhibition, which marks 25 years of her diving and underwater photography, Linda Pitkin is offering editions of her photographs for sale as Fine Art Prints. Her profits have been donated to the Tsunami Earthquake Appeal up to the beginning of April, and from then onwards will go to another environmental or humanitarian charity.

The prints are made by the Giclée method, renowned for producing works of superior quality, intensity of colour, and longevity, using fine art paper and archival pigment inks. For this, Linda is delighted to have enlisted the superb skills of Dennis Firminger.

For more information and to order prints see Linda's website

www.lindapitkin.net

## Digideep Middle-German Champion

Digideep are very happy to announce that their technical administrator Lars Kirchhoff scored 4th and 2nd place in category E 'Beginner Digital' during the Middle-German Championship in underwater photography.

He was awarded the title of 'Middle-German Champion' in this category.

The competition is considered as preliminary decision fort the prestigious Camera Louis Boutan Competition. In 2005 the Camera Louis Boutan is going to celebrate its 27th anniversary.

www.digideep.com

## Scientific photography course Bermuda
## July 31 - August 20 2005

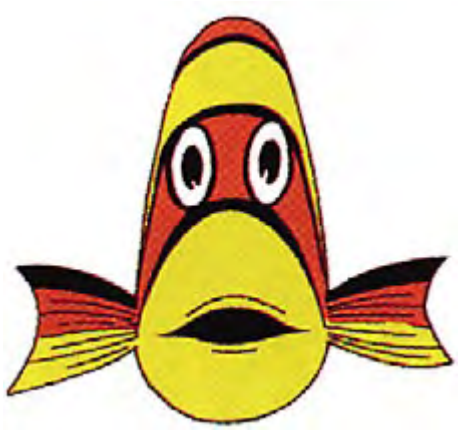
Colleagues, we are offering a course in scientific photography at the Bermuda Biological Station in St. George's Bermuda. This three week course will run July 31 - August 20 in 2005 and is open to the public including divers, scientists, teachers and students 18 and over. The course starts with the basics and advances to Underwater Photography and Videography.

Past students are publishing their images in natural history magazines, using them in their research programs, publishing them in scientific papers and using them in education and outreach projects.

The BBSR is an ideal location for this course. As a mid-Atlantic island, Bermuda has many unique animals and plants. Bermuda's marine ecosystems include anchialine ponds, rocky shores with limestone formations, sea grass beds, mangrove forests, caves and coral reefs which are in excellent condition. The course is taught in an environment where there is always a lot of interesting research going on. There are approximately 5-6 spots still left.

www.bbsr.edu/Education/summercourses/photog/photog.html

## Antibes 32nd World Festival of Underwater pictures



The 32nd World Festival of Underwater Pictures will take place from October 27 - 30 2005 at the Convention Centre of Juan-les-Pins in France.

The theme will be " The Abyss" and the President of Honour will be Sylvia EARLE, Executive Director, Global Marine Program, Conservation International, Washington DC USA.

Stand reservations should be made as soon as possible, as the total space available is limited.

If you wish to receive a regulations/registration form or a stand reservation form by post please send your request to: FMISM, 62, Av. des Pins du Cap, 06160 Antibes Juan-les-Pins France

Email :
info@underwater-festival.com

## Tawali with The Westmorlands - 18 Oct-01 Nov 2005

Join Stuart & Michele for a photography workshop. This adventure will give you the opportunity to hone your shutter bug skills at a luxury land based resort and a fantastic live aboard dive boat. The absolute best of both worlds.

Your adventure includes 11 nights at Tawali resort and 2 nights aboard the live aboard Chertan.

Stuart and Michele are a photographic team residing in Mill Creek, WA. With a combined experience of 30 years, they travel the globe capturing exceptional images of the fascinating underwater world. They also are specialists in the more terrestrial parts of the world photographing wildlife, travel destinations and people. Both Stuart and Michele have had their images and stories appear in some of the most highly recognized publications such as Outside, National Geographic Traveler and Adventure, Islands, Nature's Best and many more.

They are regularly published in the largest dive magazines such as Sport Diver, Sport Diving, Fathoms and other international dive publications.

www.reefrainforest.com

# Bonaire Digital Shootout July 23-30 2005


Sharpen your underwater photography skills and learn the latest in digital imaging at the fourth annual Digital Shootout, July 23-30th at the Divi Flamingo Beach Resort in Bonaire. Far beyond a standard photo safari, the Digital Shootout is an in-depth learning experience on underwater digital photography that offers hands-on photo workshops, seminars on Adobe Photoshop, free use of demo gear, professional critiques and a photo contest with great prizes.

Berkley White owner of Backscatter Underwater Video and Photo, Dan Baldocchi of Light & Motion, professional underwater photographer Jim Watt, and Eric Cheng of Wetpixel will be your team of experts for the week.

If you have never taken an underwater photo come give it a try at our Digital Demo Day. We are offering free use of our equipment to those who need it.

In addition to the instructional seminars the Digital Shootout ends with a photography contest that includes some major prizes for the best images taken during week. There are prizes from Light & Motion, Backscatter, Nikon, Adobe, Sea & Sea, Kararu Dive Voyages, Lexar Media, Ultralight, Aqualung, Oceanic, and more.

Don't miss this opportunity to shave years off the learning curve while blowing bubbles in paradise.

Space is limited so sign up today!

For booking information, contact: Dan Baldocchi

dan@lmindustries.com

www.thedigitalshootout.com

www.divephotoguide.com

DivePhotoGuide's mission is to match the needs of underwater photographers and videographers of all levels with the facilities of dive operators worldwide.

Of course there are other directories online, but nothing like this. DivePhotoGuide.com is on the way to becoming the most comprehensive dive operator directory in the world, catering mainly to underwater photographers and videopgraphers. Currently divers and photographers can sign up for a free beta-membership with access to photo galleries from some of the top underwater photographers in the world, centralized photo contest calendars and breaking about diving and underwater imagery. The DPG Dive Operator Directory will officially launch during Celebrate the Sea in Singapore this June.

jason@divephotoguide.com

## New shipwreck in Grenada


The 170 foot / 50 m "HEMA 1" is now the newest addition to the already diverse portfolio of Grenada's ship-wrecks. Laying on it side, still swaying in the current, in a depth of 30 m / 100 feet it will soon become a new attraction.

On the first dive Aquanauts did one week after it sank, already reef & nurse sharks were investigating the new wreck as a possible resting place. Like the "Shakem" which sank in 2001, it will be an interesting example to see how quickly marine life takes over and makes it a new artificial reef.

Aquanauts will report and document the growth development on the new wreck regularly. But already it is clear that the wreck of "HEMA 1" will be one of the main attractions in Grenada's waters due to its location in the nutrient rich Atlantic current off the south coast where other wrecks like "San Juan" and "King Mitch" have an impossible to resist draw on experienced adventure seeking divers!

www.aquanautsgrenada.com

## "Benchmark liveaboard operation" award for Ocean Rover

Ocean Rover was awarded top honors in a recent Liveaboard Survey by AustralAsia ScubaDiver Magazine.

The extensive survey listed more than twenty liveaboards from all over the Asia Pacific region and concluded that Ocean Rover Cruises is the "Benchmark Liveaboard Operation" to which other boats and operators could measure their product.

The survey took into consideration many aspects of liveaboard diving and was conducted by an experienced team led well-known underwater photographer Michael Aw who has traveled on board many of the vessels listed in the survey. Please see

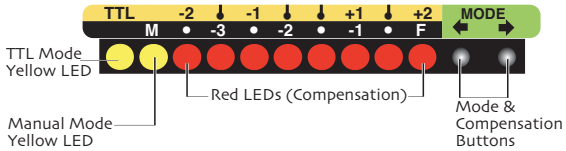
http://www.ocean-rover.com/news/index.htm for details.

# Ikelite SLR-DC Housings offer eTTL Compatibility.

To extend the capabilities of the digital SLR cameras Ikelite designed the SLR-DC underwater housing. This housing is injection molded of clear polycarbonate for strength, visual access to the camera, LCD screens and camera controls. The ergonomic design places camera functionality at your fingertips for the ultimate in creative control. The interchangeable port system accommodates a wide variety of lenses from macro to wide-angle to zoom. The rubber handles offer excellent grip and a quick release system for Ikelite's new SA-100 Arm system. An external Ikelite connector is provided to connect single or dual Ikelite Substrobes.

**For •Canon EOS Rebel •Canon EOS 300D •Canon EOS 10D •Canon EOS 20D**

These Ikelite SLR-DC housings for Canon have Conversion Circuitry built into the camera tray. When used with an Ikelite DS Substrobe; the Conversion Circuitry provides real Canon eTTL flash exposure with over and under-exposure compensation of two f-stops in half-stop increments. At the push of a button, switch to Manual Exposure Mode which provides eight power settings in one-half stop increments. All exposure compensation is done with 2 buttons on the back of the housing, no accessing complicated camera menus.




Think Digital

**SLR-DC Housing Features:**

- Clear Molded Polycarbonate
- Corrosion Free
- Interchangeable Port System
- Clear View of Info Window
- Clear View of LCD screen
- Most Camera Functions Available
- Weighted for Neutral Buoyancy
- Quick-Release Strobe Mounts
- Rubber Hand Grips
- External Connector for Substrobes
- Super-eye Magnifier for Enhanced Viewing with a Dive Mask.
- Weight 6.6lbs. (2.9k)
- Dimensions 7.5"L x 4.75"W x 7.25"H (19cm x 12cm x 18cm)


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


www.ikelite.com

**Ikelite SLR-DC Housings also Available for**

**•Nikon D70 •Nikon D100**

**•Olympus E-1 (TTL)**

# New products

## Ikelite Housing for Fuji F-810 Digital Cameras


A mini-version of Ikelite's heavy duty thick wall housings is available for the Fuji F-810 digital camera. It is virtually indestructible and provides 200 feet depth capabilities.

All functions of the camera are accessible in this corrosion free clear polycarbonate molded housing. The flash built into the camera operates fine in the housing, but an optional DS series strobe placed farther from the lens improves the photographs by reducing the illumination of particles in the water.

The sensor placement on the camera and addition of diffuser precludes use of the TTL Slave Sensor. The EV Manual Controller is suggested. It provides 10 power settings with the DS-50 or DS-125 digital SubStrobes.

Optional adapters are: #9306.80 which allows attaching and removing the Inon UWL-105AD bayonet style lenses underwater and #9306.81 which allows attaching and removing the 67mm threads of the UWL-100 conversion lenses from Epoque and Inon underwater.

Optional #9523.31 is a tray with a release handle which allows optional SubStrobes to be attached.

www.ikelite.com

## Sea & Sea VX-FX1


The VX-FX1 is a professional-quality housing, thoroughly refined with state-of-the-art technology to satisfy the high standards of the broadcast industry and discriminating digital video editors. Wait no more for high-definition underwater video!

www.seaandsea.com

## Gates Sony FX1/Z1 video housing


A new revolution in underwater imaging is here: the new FX1/Z1 housing from Gates!

Setting a new standard in resolution and clarity this HD system is classically Gates: durable 'bulletproof' machined aluminum and 100% reliable mechanical controls. Important functions like iris, white balance and manual focus are readily accessible, and Fathom Imaging ports provide the clearest, sharpest images possible – a no-compromises requisite for any HD endeavor.

www.gateshousings.com

## Nexus Nikon D2x housing

The Nexus housing for the Nikon D2x DSLR is made from cast aluminium and has 24 controls to give you total access to the camera's functions.

It weighs just 9 lbs with the camera and is 12.75" wide (with handles), 9" high and 5.25" deep.

It is closed with 5 stainless steel latches and will be available in two versions - F4 screw thread ports and F90 screw thread ports.

They are supplied with two Nikonos sync sockets and 2 spare ports for remote controls or video out.

www.usanexus.com

www.oceanoptics.co.uk

## Epoque EHS-400X for Sanyo Xacti DMX-C4/C1

EHS-400X has a 55mm threaded metal front port for attaching filters, wide-angle lenses and macro lenses. It has 5 stainless steel latches for secure closure. It has a comfortable adjustable hand strap. There is a metal threaded mount base for sturdy attachment to trays or tripods. External strobe units can sync through the special optical sync port. A video light or strobe can mount directly on the camera case through the use of a shoe mount or attached to the Epoque Slot Tray accessory. A wide range of accessories that will expand your photographic capabilities supports the EHS-400X.

www.epoque-usa.com

## Nexus D70 *Digital*

*Anthis/Nexus since 1979*

*Nexus offers amazing features with compact size.*

- *Glass Optics*
- *Dual Sync ports*
- *Aluminum housing*
- *Full controls*
- *2 Extra external glands*
- *Adjustable handles*

*Visit **www.usanexus.com***

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

*858-455-0873 USA Nexus*

## Epoque • USA

*Digital strobes••••••••••••••*
*Wide angle lens*
*Macro lens*
*Video Light*
*Focus light*
*Arms and Trays*

Macro Lens

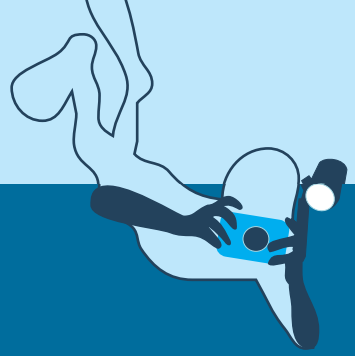
.54x Wide Lens

***www.Epoque-usa.com***

Find all the accessories you need for digital underwater photography

***Epoque-USA • 858-455-0872***

FANTASEA line



Fantasea Line Introduces:

# FD-70 Housing
## For the Nikon D-70 Camera

**Also: The Coolpix Collection for the Nikon**
**2100, 2200, 3100, 3200, 4100, 4200, 4300, 5100, 5200**
**Coming soon !!! 4600, 5600, 7600, 5900, 7900, 8700 and 8800.**

NEW PRODUCT !

Suggested Retail price **$999**
including standard port and anti flooding insurance program!

**Accessories:**
Strobes, Wide angle and Macro lenses, Arms, Trays, LED Lights and more now available!

Purchase On-Line at best rates ever :
www.fantasea.com
Special program for authorized dealers.
For more information: info@fantasea.com

# Fantasea CP-6 & 7 housings for Nikon Coolpix 4600, 5600, 5900 and 7900 cameras

Fantasea Line International is pleased to announce the launch of the CP-6 and CP-7 underwater housings, now ready for delivery worldwide.

The CP-7 was purpose designed for the Nikon Coolpix 5900 and 7900 digital cameras and the CP-6 was purpose designed for the Nikon Coolpix 4600 and 5600 digital cameras.

They are a compact injection molded plastic housing, that will fit conveniently in photographers hands and make outdoor digital photography easy for everyone, amateur or professional, who is concerned about water damage to expensive cameras in activities that include scuba diving, snorkeling, boating, sailing, white water paddle sports, winter sports, or for family fun at the beach or around the swimming pool.

Both housings have 4 camera function control buttons including:

Zoom/Wide Angle
Review
Maximum operating depth to 40meters/130 ft.

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www.fantasea.com

# A year with the Seacam Fuji S2


## by Paul Kay

### UK Seacam agent


When I decided to move over to digital for underwater use, I was already running a D1X above water. So I had a choice of either housing the D1X or buying another camera (for underwater use only). My existing two housed cameras were both Nikons: an F100 and an F80, both in Subal housings and I had a variety of lenses which included the 12~24 DX from Nikon.

Without running through my decision making process too much, the critical factors which finally influenced my choice were the ability of the Fuji S2Pro to operate ttl flash with Nikonos V type flash units, and its use of AA cells. So in the end I went for the Fuji S2Pro and am still running it with 12~24 DX zoom and the 60 micro Nikkor. (Out of interest, these equates to an equivalent 19~38mm wide-angle zoom, behind a dome port, and 144mm macro lens behind a flat port).

Perhaps it is pertinent at this point to first comment on my impressions of the Fuji S2Pro and Nikon D1X comparatively – based on my own opinions, and based on the results that I have had. Although the D1X is a 5 Mega Pixel camera, I believe that it produces marginally 'better' image quality than the S2Pro – files are very even in terms of tonality and there appear to be less noticeable chromatic aberrations. Its build quality is of course in a different league to the Fuji as it equates squarely to Nikon's pro series 35mm cameras and,

as you might expect, it performs extremely well in all aspects such as autofocus accuracy and speed, exposure, ease of use and so on. The D1X is a very competent, robust and well-specified camera, suitable for professional use.

The S2 on the other hand is a far more lightly built unit but one which I believe is ideal for putting in a housing. It is based on Nikon's F80 and an F80 can easily be put into an S2Pro housing by having an adapter block built – dual format! Its real advantage over most other dSLRs is its ability to work with conventional ttl flash – which is excellent for macro work as it is very accurate and this combined with the histogram feature on the camera makes for a versatile close-up flash system. Underwater it is a very viable machine, almost certainly offering more features than most users will ever need for most underwater photography (as do many housed cameras).

My opinion, having used it underwater for over 9 months, is that it works very well in the vast majority of situations and delivers excellent images. It does though, have downsides when housed. Some are common to many other dSLRs, others are more specific to the S2Pro.

First is the fact that it is based on a relatively cheap Nikon film camera – the F80. Now I have used an F80 in a housing for over a year and found it to be a perfectly usable camera underwater, but sales of F80 housings almost certainly bear out the fact that it was not a popular camera to house – am I being cynical in thinking that this is because it was too cheap a camera to bother housing? I'd like to know sales figures for F80 housings compared to say F90 or F100 housings but expect that the F80

sold far less. Which makes it odd that dSLRs based on or similar to the F80 are very popular!

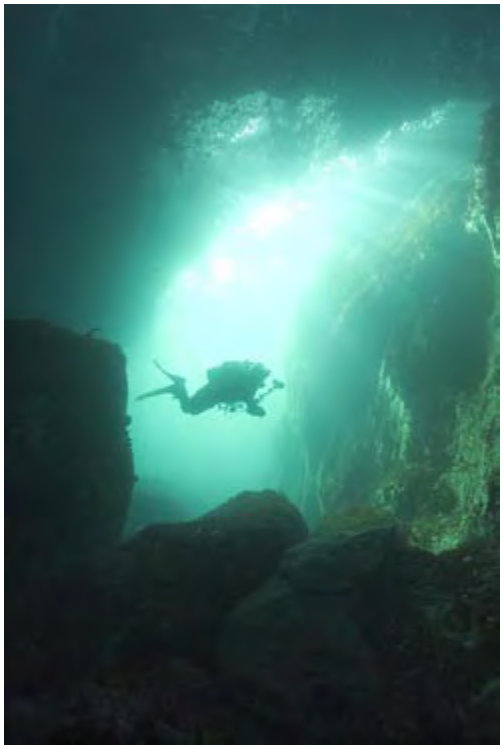
So why should this be a problem? Well basically because the autofocus is quite simply not as good as say an F100 or F5 or D1X. The F80 and F80 derived units also all seem to have a feature described as focus tracking in the manual. I have found that this can cause problems if the photographer and the subject are both moving (as is often the case underwater) and conditions are not quite as perfect as they might be. Then autofocus has a tendency not lock on properly and hunts. As light levels and contrast reduce then the problem becomes worse – this may not affect tropical divers as much as those of us who dive in cooler, murkier waters where it can be frustrating at times. I've found this with both F80 and S2Pro and assume that it happens with the D100 and Kodak based dSLRs too. It's a feature I would rather not have and which cannot be switched off.

Another problem that the S2Pro suffers from is that it can be power thirsty, although this depends on what compact flash card is in use as well as the way in which the camera is used. The battery level indicator is about as useful as the fuel gauge in a Peugeot 205, which if you haven't driven one means that it bears little relationship to actuality! The good news is that the camera runs on AA sized batteries so spares can easily be carried – either rechargeable (now up to 2300mAh) or conventional.

Otherwise, I have very few gripes with the camera, other that is than its viewfinder! Fuji have simply masked off the F80 full frame 35mm viewfinder to produce a smaller image of the actual image area of the sensor, and have left the viewfinder display where it was, sitting somewhere well below the viewed image. This means that the viewfinder is smallish and that it can occasionally be awkward to see the data. There is a very effective solution which I was able to adopt. I use a Seacam S45 Sportsfinder – a simply superb viewing system which compensates for much of the Fuji's smaller view by producing a very clear, easily viewed image indeed – but at a significant cost! I could not go back to using a conventional viewfinder after the S45 – it is that good.

Which brings me on to the Housing. As the British and Irish importer and retailer of Seacam housings, I obviously opted to use a Seacam Silver housing for my S2Pro. Seacam have been producing housings for a long time now and concentrate on Pro and high end enthusiast cameras. They produce a range of dSLR housings for cameras including the Nikon D1 series, D100 (and soon D70) Fuji S2Pro, and Canon EOS1 Series (the latest of which will take the 1/1DS/1DmkII). All are similar in design and offer use of most controls.

Although I may be accused of bias, I have to say that in my own, honest opinion, I consider Seacam housings to be extremely well built. All glands are all double 'O' ring sealed and the main and port 'O' rings are large and would be very difficult to fit wrongly – I doubt that a port could be fitted it the 'O' ring was not seated accurately. The Silver finish is extremely hard and durable – after 9 months my own housing looks hardly used (and you should see some of my other housings – I do not treat them with kid gloves, they are to be used). Seacam are getting an enviable reputation



for producing a very high quality, precision engineered product. Sadly this usually means that newly designed housings have a waiting list!

The S2Pro housing is very similar to Seacam's D100 housing – the front section is actually common to both. It appears to be a 'chunky' housing although actually weighs very little more than my old Subal F100 housing. The size is a design feature as, depending on lens/port/finder, buoyancy varies from slightly positively buoyant to a little negatively buoyant. Buoyancy is a function of size so…. .

Controls are well placed and the only one to require any care in operation is the rear command dial, which is a trifle small and needs care to ensure that it rotates (by the right hand thumb) properly.

The SCM focus selector switch is an optional feature from Seacam. Whilst I had this fitted, I am not sure why as I have rarely used it to date and as it is possible to knock it to MF (as on many other housings – this is due to the camera control's position) inadvertently. I did have a second flash socket fitted (so my housing has two Nikonos 5 type sockets as flash sockets are the most likely area to give trouble on ANY housing) and I also had the audio/visual leak detector fitted.

One feature that I have been pleasantly surprised with is the shutter release, which can be operated either by conventional forefinger or by thumb. After nine months use I now prefer the thumb – it gives very fine control indeed! A clear window on the back of the housing allows for easy viewing of the lcd screen – which on the S2Pro is positioned better than some dSLRs for housing – it is not blanked by the viewfinder. Reviewing is very straightforward underwater and use of the histogram allows for accurate checking of exposure as the lcd is a little bright sometimes, depending on ambient light conditions, for a purely visual check.

Handles are fitted to either side of the housing and are easy enough to grip – they also offer some protection against bumping! Ports are glass and are available with an optical coating – despite this they can be scratched (especially if thrown into a rib about to be run down by a merchantman whose radio watch keeping was less than good!) if badly treated!

I use a flat port for the 60mm lens and a WidePort plus Extender 35 tube for the 12~24 which produces excellent image quality if used at f/11 (which is my preferred wide-angle aperture).

Flash mounts are conventional flat plates mounted on top of the housing but are slightly deeper than most. Some arm systems such as Ultralight will require a thinner plate or dovetail adapter to be used. I use a Seacam arm which has a ball size similar to Ultralight/TLC/Inon etc (1" or 25mm). Seacam arms are similar to 'buoyancy' arms and are virtually neutral underwater.

Whilst Seacam produce flash units, they utilise Subtronic electronics and I have to date stuck with my old SB105s and a wondrous Subtronic Mega Colour. This flashgun has the ability to be warmed or cooled in colour temperature. Combine this with RAW files and matching of the colour temperature of the image with that of the flash allows the background water colour to be changed – something which I am currently experimenting with. The S2Pro works very well in ttl mode (between 100 & 400 ISO settings) for macro photography with both the SB105s and the Subtronic unit (I've also tried a YS120 with good results). For wide-angle I prefer to use manual flash settings and again find the Subtronic very helpful here as it is very adjustable.

All in all I am satisfied that I made to right choice in opting for the S2Pro in a Seacam housing. I only operate using RAW files and find these to provide quality sufficient for many purposes if opened in Adobe Photoshop CS and optimised appropriately. My only real complaint is that the S2Pro is only a 6 Mega Pixel camera and in the near future I have no option other than to switch to using a Canon EOS1DS (in a Seacam of course) to improve on this!

**Paul Kay**

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# Olympus μ-mini DIGITAL & 3m housing

Japanese camera manufacturer Olympus have a long history of producing 'weatherproof' cameras and their latest digital compact μ-mini DIGITAL is no exception.

My review camera was gold but there are also five other colours available and I think this says a great deal about the camera. This is a camera for those who want to be seen with it.

Rather like the Apple iPod Mini which was underspecified and not much cheaper than the original iPod (yet is much more popular amongst youngsters), the μ-mini DIGITAL is very much about style. You only have to look at it to appreciate that.

However, this is no dumb blonde camera. Its 4 mp chip produces excellent results at the touch of a button. Sure there is the usual shutter lag but this comes with the territory. Other than that you have a fully automatic point and shoot camera that not only looks good, it performs well. Sure there are 14 'scene's which can be selected but I suspect that the majority of people attracted to this camera will like its up front simplicity with added flexibility if needed. Similarly with the zoom it's 2x which is less than most by comparison but more than adequate to this cameras purposes.

Now our idea of waterproof is not the same as Olympus's. To them it really means 'moistureproof' i.e. don't run it under a tap but you'll be fine in the sauna, though why you should be taking pictures in there is nobodies business. Whilst to us mild eccentrics this is nowhere near waterproof enough, to your non-mild eccentric it is a very useful specification because you don't have to worry about


the camera. It is designed to be rugged and still perform.

For those who want to take the camera underwater there is a very dinky 3m water resistant housing, the CWPC-01 which is only just bigger than the camera (obviously) and has all the controls to operate it to that depth. Being just 3 metres means that the majority of controls don't have to have O rings but can be operate through more elegant gaskets.

Just like the camera, the housing is very stylish and attractive and looks much nicer than those brutish 40m housings with their butch O rings, bulky fillter threads and oversize controls. I suspect the majority of users will take it in the swimming pool despite the fact that it will perform well on shallow coral reefs.

The μ-mini DIGITAL and CWPC-01 are perfect for the image conscious who are concious of their image.

www.olympus.co.uk

**Peter Rowlands**
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# UR Pro Shallow Water CY Filter

## by Alexander Mustard

A quick click on the UR Pro website will tell you that UR Pro's Colour Correction filters are not only well used but also well loved by underwater cameramen and filmmakers. The Stan Waterman's quote sums it up really "URPRO filters provided dependable color balance to an otherwise monochromatic blue world…I depend on them". More recently photographers have discovered that UR Pro's filters can work similar wonders when combined with digital still cameras. I am a big fan of their CY filter, designed for clear, tropical water and when I heard that they were releasing a new product, the shallow water CY filter (SW-CY), I had to try it.

UR Pro's justification for the SW-CY is to provide a filter suited to work between the surface at 8m (25ft), the standard CY filter is designed for an overlapping but deeper range of 3-20m (10-60ft). The two filters look identical, but have quite distinct filtration characteristics.

Most still photographers find that the most pleasing filtered images come from shallow depths (<10m/30ft). In deeper water (>10m/30ft), although filters improve significantly on reality, the shots can still look a bit drab. Furthermore filters work by subtraction of light so at depth we are forced to use higher ISOs to compensate for the ever-decreasing illumination, which introduces noise. Videographers can get away with these compromises because movement enlivens their images, but drab colours in a still image just leave the viewer wishing for flash! So the new SW-CY promises to be well suited to the favoured filtration depth range of the still photographer.

I decided to test the SW-CY filter on two camera systems. First I did the fully automatic evaluation using an Olympus 5060 with an INON WAL using AUTO white balance and shooting JPGs. Then for those who like more control I tested it on a Nikon D70 with a 20mm lens shooting in RAW and custom white balancing using the dropper in Photoshop's Camera RAW Plug-in. On the same dive (I did a lot of popping back to the boat) I shot the D70 with a CC40 Red filter (on the 10.5mm lens) and a standard UR Pro CY filter on a 17-35mm lens. All these shots were taken in 3.5m (14ft) of water near Stingray City Sandbar.

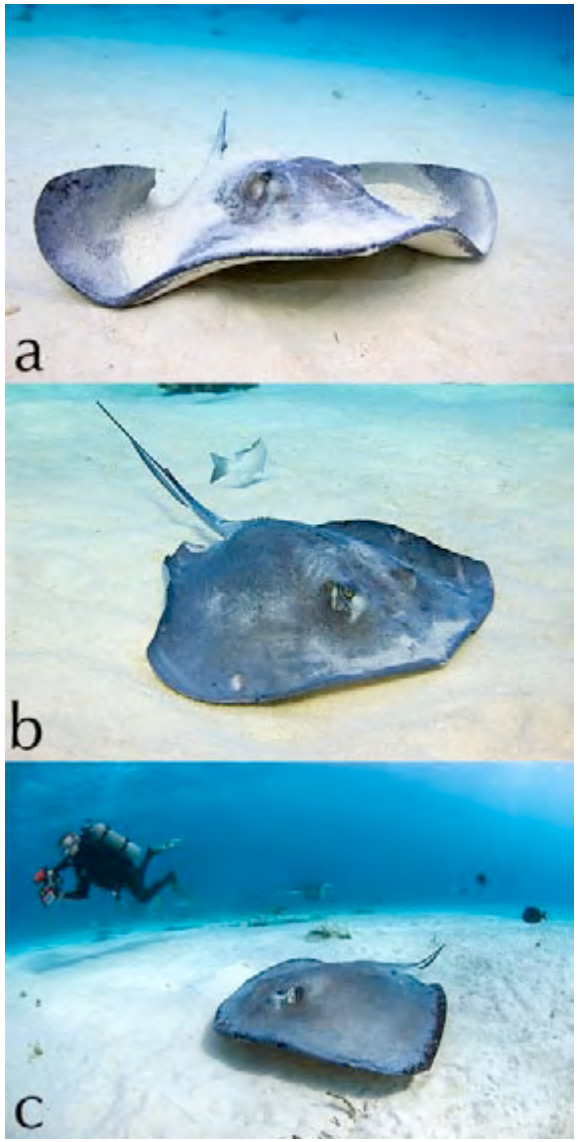
The SW-CY worked very well on the Olympus 5060 and nearly all of the images looked fantastic straight from the camera. The colours of sand, stingrays and skin tones were all very pleasing. Human skin tones are notoriously tricky to get right but I thought that they were recorded with impressive accuracy. In short with the SW-CY the 5060 produced great colour with auto everything, point and shoot simplicity.

*Diver and stingrays. The UR Pro Shallow Water filter produced pleasing colours, including skin tones, in AUTO white balance. Olympus 5060 + Inon WAL + UR Pro SW-CY filter. No flash. 1/80 @ F5.6 ISO 100.*

The only problem I encountered was the camera's AUTO white balance would get a bit confused occasionally and a few pictures came out slightly yellow. I am not sure what was causing this, but a simple post processing application of AUTO COLOUR in Photoshop solved this minor glitch.

Unsurprisingly, the SW-CY also yielded excellent results with the D70 again producing accurate skin tones and natural environmental colours. I tested the filter against a standard CY and a 40CC Red filter and, after custom white balancing, all

*Diver and stingray. The UR Pro Shallow Water filter also worked well with the DSLR when shot in RAW and white balanced with the dropper tool (on white T shirt) in the Adobe Camera RAW Plug-In for Photoshop. Nikon D70 in Subal Housing, 20mm lens with UR Pro SW-CY filter. No flash. 1/100th @ F7.1 ISO 200.*




*Three images of stingrays. All three filters produced most satisfactory results after custom white balancing as before: a) UR Pro SW-CY filter on 20mm lens, b) UR Pro CY filter on 17-35mm lens, and c) Kodak Wratten 40CC Red gel on 10.5mm lens. All Nikon D70 in Subal Housing.*

three produced excellent results. The SW-CY required the smallest white balance correction of the three relative to a "standard" daylight, but none required large white balance corrections. These corrections were small enough not to have a detectable effect on image quality (large white balance adjustments in RAW do degrade image quality).

One point of interest is that the camera's AUTO white balance produced more pleasing colours straight from the camera with both the UR Pro filters than the 40CC Red. It is possible that the Colour Correcting (warming) UR Pro filters make it easier for the camera to AUTO white balance than the Colour Compensating (adding red) 40CC Red Gel.

On the negative side, my only frustration with the UR Pro filters is that these glass sandwich filters can only be fitted to lenses that accept screw filters. This notably excludes my two main wide angle lenses: the 10.5mm and 16mm fisheyes.

In conclusion the SW-CY is excellent and works well (as is clear from the images). I would expect most photographers would not want to buy both the CY and SW-CY given the large overlap in their operational depth ranges. Which filter to choose depends on what, where and why you shoot. If you want a versatile filter to use while diving then the standard CY is still your best choice. However if your reason for getting in the water is photography, and you are prepared to constrain your diving within the depth range of the filter, then the SW-CY used in the brighter light of the shallows is an excellent choice.

**Alexander Mustard**
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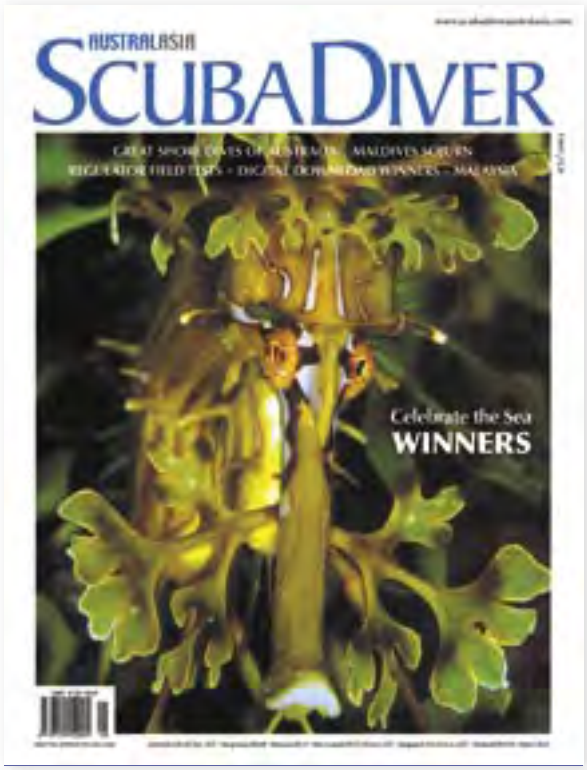



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# Wide Open Spaces

## by Peter Rowlands

Panorama photography is nothing new but now, with the digital age, it has never been easier. There are several inexpensive, and sometimes free, software programmes which can blend your individual images together and produce a stunning vista which would not normally be possible in a single shot.

My introduction to panoramas happened quite by chance on a January holiday in New Zealand. (A holiday, by the way, is a diving trip without the diving!) We were staying with friends on the outskirts of Auckland and they took us to Devonport, a peninsula which overlooks downtown Auckland. It was a beautiful fluffy cloud, sunny day and the view as we came over the hill was absolutely breathtaking.

Armed with a simple Olympus C40 entry level digital camera (4mp which produces jpg shots about 1mb in size which will print excellent A4 prints) I stood in one place and took 5 consecutive shots from left to right making sure I had left plenty of overlap from one shot to the other. It took no more than 30 seconds.

Subsequently on a motorhome trip the next week to South Island, NZ we stopped on Crown Ridge to take in a spectacular view of the valley below. No single shot could take it all in one so again I took another series of shots from left to right. Anyone who has been to South Island NZ (as our brave Lions rugby team will soon be doing) will know that there are countless such scenes which cannot be captured in a single shot.

Fast forward back home to the tail end of a British winter and I downloaded my digital photos onto my laptop (a true holiday, by the way, is a diving trip without the diving and without a laptop and internet access!). Once I had dealt with the e mail backlog and sorted out the Nikonos repair estimates I started to look through my images from NZ.

Opening the first frames from the Auckland vista in Photoshop I started to blend them all together and after a while I had built a credible single image panorama by correcting slight exposure and perspective variations.

Now I'm a great believer in "fate" or "kismet" and for some reason I was looking at the list of applications on my Apple laptop and one jumped out at me. "PanoramaMaker" (www.arcsoft.com) seemed to shout to me that I should open it because it suggested that it could 'make panoramas'.

Seconds later (and obviously without reading the instructions) I had imported the same Auckland shots and was amazed, about a minute later, to see that the programme has not only produced an excellent panorama but it was also better than mine which has taken about half an hour to create! Within minutes I had several panoramas completed which only needed slight retouching to make them complete.

With these land panoramas in the bag I was keen to try the technique underwater but had no underwater

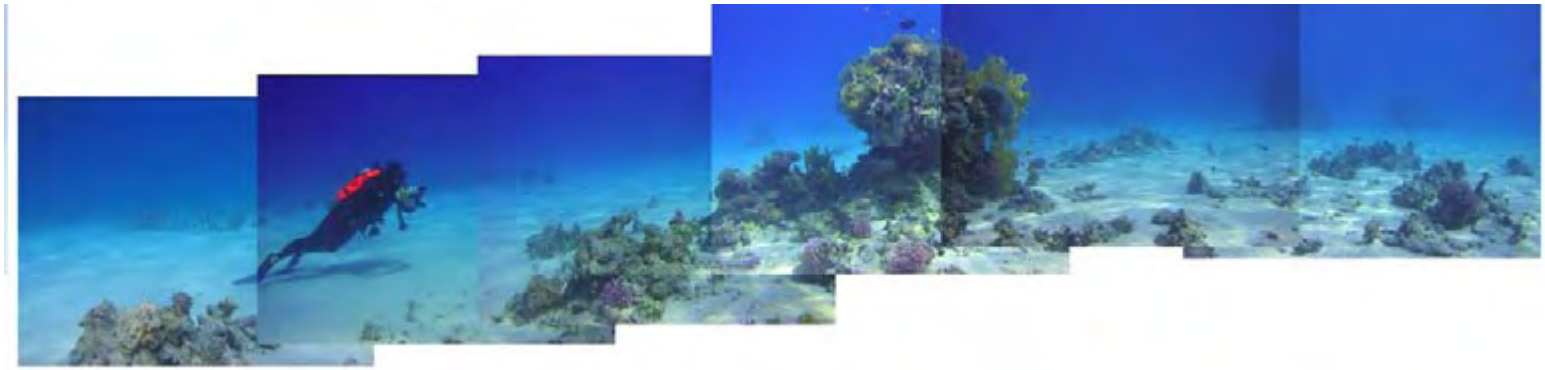
trips planned in the forseeable future. Once again 'kismet' surfaced after a chance meeting with Alex Mustard to photograph his shiny new Subal housing for the Nikon D2x digital SLR camera. He mentioned he was looking for a last minute trip to the Red Sea to test his new outfit and within a couple of hours we were booked on MV Snapdragon out of Sharm el Sheik for a week joining a 'normal' diving trip.

On the check out dive I passed my buoyancy test with flying colours and took down my Olympus C40 in its PT-012 housing with a UR Pro CY colour filter. Alex gratiously agreed to steal himself away from his new housing combo to pose for me for my first underwater panorama. The result was not very successful but it illustrated exactly what is needed to produce a good panorama.

The following guidelines may seem obvious but here goes:
Stay in one place and rotate your body rather like a tripod.
Make sure you keep as level as possible.
Overlap each shot by at least 25%.

The beauty of digital photography is the speed of results. After each dive I was able to open PanoramaMaker, import the shots in sequence and about a minute later I was looking at the finished image.

With my original Auckland



*The first trial underwater was not very successful but it illustrated exactly what is needed to produce a good panorama. This is six shots cut and pasted together to show that I should have kept the camera more level and used manual exposure to keep it consistent from frame to frame. Olympus C40 PT-012 housing, standard lens at wide, UR Pro CY colour correcting filter.*

*Taking 4 or 5 vertical frames and blending them together with PanoramaMaker produces a shot which shows a large subject, such as this wreck the Carnatic in the Red Sea, in its juxtaposition with the reef. Olypmus C40, PT-012, Inon WL-165, UR Pro CY colour filter*

*(Above) The same wreck shot a few years later and joined together as a panorama. Olypmus C40, PT-012, Inon WL-165, UR Pro CY colour filter*

*(Left) A single frame shot of the Ghiannis D shot on film a few years ago with a 16mm full frame fisheye lens*

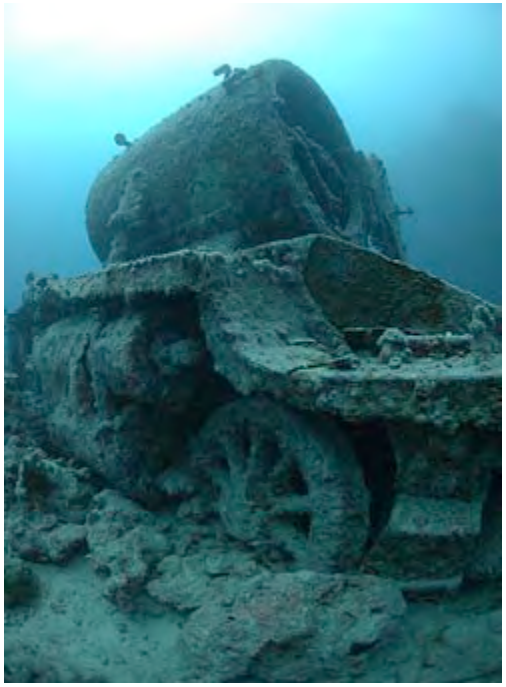
panorama I was using the standard lens which is about 35mm. Underwater this would not be wide enough for large subjects so the ideal lens needs to be the 35mm equivalent of around 20mm.

The WL-165 Inon wide angle lens is very wide (165°) but it produces very little geometric distortion and PanoramaMaker coped well when joining these images together. With such a neat camera package I was producing final images which would produce prints about 210 x 600mm in size with a file size of around 5mb.

Theoretically you should not use a full frame fisheye lens for panoramas because of the geometric (barrel) distortion it produces. That, however, is the worst thing you can say to me so I decided to try the 10.5mm Nikkor on my Nikon D70 in a Subal housing behind a low profile dome which produces noticeable edge distortion at wide apertures. Add to this that the dive was to be on the Thistlegorm at 7.30am (i.e. when the sun was very low in the sky) and that the subject I wanted was at nearly 30 metres so things were stacked against me.

Actually I had another reason to try the 10.5mm because I had a theory that whilst the geometry may be distorted the central dimensions

*(Above) Despite the barrel distortion of a full frame fisheye lens, PanoramaMaker did a good job stitching 5 vertical shots together.*
*(Below) A typical single shot of the engine on the starboard side of the Thistlegorm. Subal/Nikon D70, 10.5mm lens, CC30 red filter 1/30 @ F5.6*



remain pretty much constant. By this I mean that a diver kept in the centre line of the frame will remain much the same proportionally when at the edge. With rectilinear wide angle lenses a divers body elongates towards the edge of the frame.

The railway engine off the starboard side of the ship lies about 15-20 metres from the wreck so I swam about 8-10 metres away from it so it looked quite small in the frame. Using a manual exposure (so the exposure didn't vary from frame to frame), I took 5 vertical frames from left to right.

Back on board, I discovered a panel in PanoramaMaker which lets you preset the lens being used. I chose 14mm (the widest) and it did an excellent job but struggled with the tone transitions between each frame. This gave a vertical band of darker water which was soon evened out with the help of Alex Mustard's subtle use of Photoshop.

Having finalised the panorama, Alex insisted on adding a diver from another shot for scale which is on the front cover but personally I prefer the non-diver version. The final result, to me, is most pleasing especially as the frames to the right have managed to capture the silhouette/shape of the bows giving a strong feeling of size and scale.

Having dabbled with panoramas, they are a technique I will be doing a lot more of in forthcoming trips. They can be produced with comparatively inexpensive digital cameras and are not difficult to shoot.

**Peter Rowlands**
**peter@uwpmag.com**

# Best Value Aluminium Housing for Nikon D70


Aluminium housings have long been the choice of professionals for protecting their expensive cameras. But they've always been costly. Now Ocean Optics brings you a stunning deal that means you can have a professional level system housing from Nexus for the same price as a plastic case.

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# Stairway to heaven

by Peter Rowlands

A two and a half hour flight from London there is a dive site which must rank in the world's top ten. The visibility is in excess of 50 metres - guaranteed - and in theory one side of the dive is in America and the other is in Europe. Welcome to Silfra cracks, Thingvellir , Iceland.

Silfra is a dive into the earth's crust where it is very gradually splitting apart. The resulting cracks are filled with glacial water which melts and is filtered through the volcanic rocks. It is pure fresh water in an area with virtually no marine growth or life producing water clarity easily in excess of 50 metres. As if the visibiity were not enough, the topography is not far from unique underwater.

Any downsides? Well, yes. The water may be crystal clear but it's only around 2°C and you have to walk all your equipment at least 50 metres over varied terrain. This is dry suit country for sure and you are unlikely to be able to go more than 30 minutes underwater before your hands stop co-operating and your brain loses its power to concentrate. It is physically very hard work but diving here is like nowhere else and the discomfort is but a fleeting irritation compared to the sensory overload this dive will produce.

It all started with an e mail from Charles Hood, senior correspondent at Dive Magazine here in the UK. How did I fancy a press trip to Iceland for 5 days in April? Like most things with me I said "Yes" without giving it any thought. It was only when I checked on the internet and found that the seawater temperature was around 5°C at this time of year that I realised I hadn't done a dry suit dive for a couple of years and even then it was in Cornwall in July when the water was a balmy 17°C.

Iceland Express is a low cost airline which has increased tourist numbers in Iceland significantly.

*(Top) A panorama of the inland lakes and cracks at Silfra where the continental plates drift apart by 2 cm per year*
*(Left) Little and Large at the diving platform at the beginning of the dive*
*(Below) A panorama of three shots at the lagoon at Silfra Cracks. The water is crystal clear with in excess of 50 metres visibility.*
*Nikon D70, Subal housing, Nikon 10.5mm fisheye. F5.6 on Auto. Preset white balance. Available light*

***The diving in Iceland is very similar to the UK except the waters are colder. Nikon D70, Subal housing, 28-70mm lens, 2 x Inon Z220 strobes. 1/125th @ F11***

They fly from London Stansted, Frankfurt and Copenhagen to Reykjavik on a daily basis. Well I say Reykjavik but actually the airport is in Keflavik which about 30 miles away but this is really handy because the dive center is in Keflavik!

The Dive Center was founded and built up by Tomas Knutssson, a go getting Icelander who has been diving these waters since the 1970's. He runs a very efficient centre and caters for small groups with varied itineraries. We had just four days to sample the local dive sites which is obviously not enough but it gave us a taste of the diving which can best be described as similar to UK diving but with usually more marine life but much colder water. Most of the dives are from the shore but, weather permitting, inflatable and hard boat dives can be arranged.

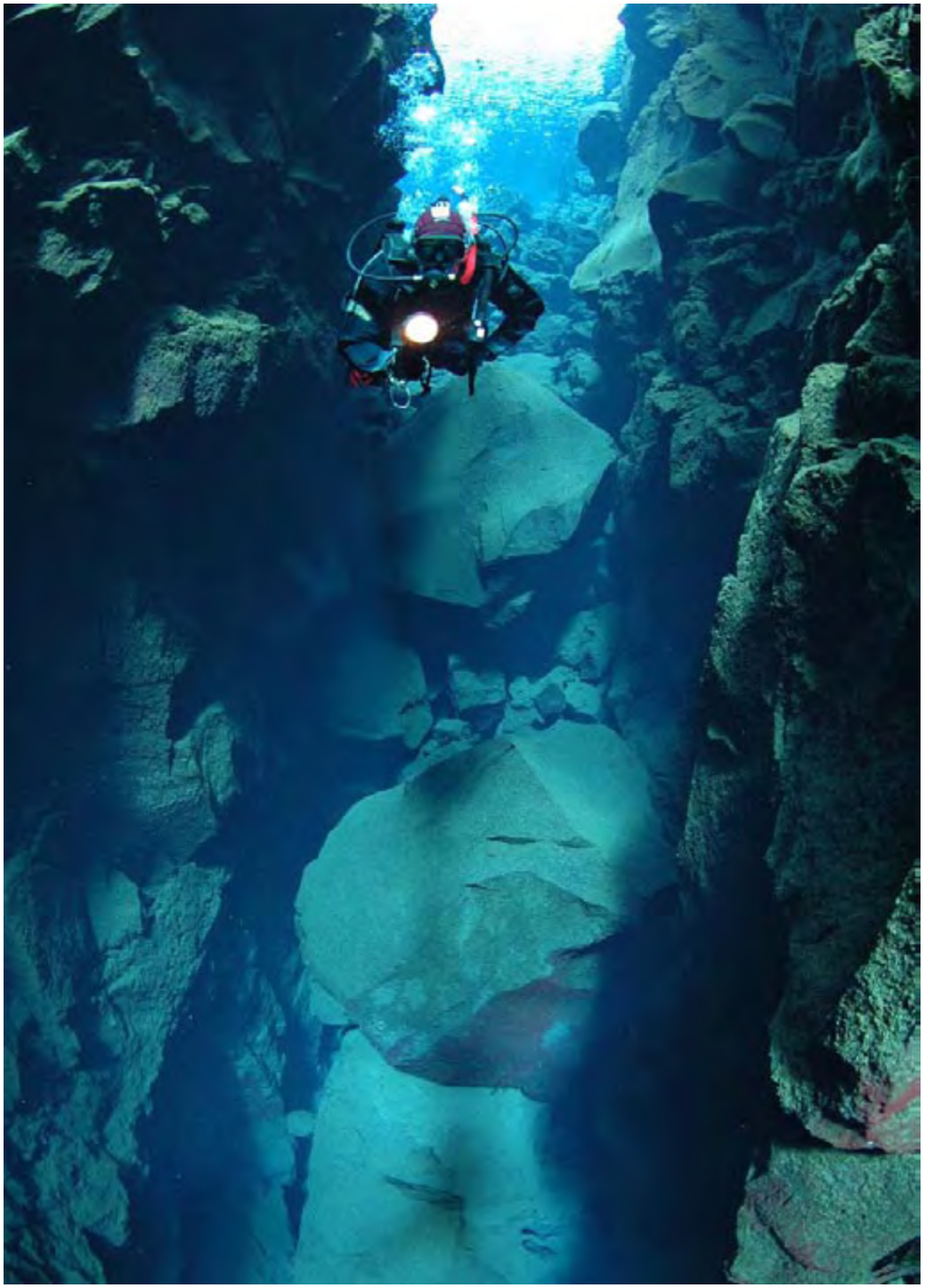
On my first dive I managed to go for 30 minutes before my hands told me to get somewhere warmer or they were thinking about falling off. Fortunately I was not alone as both Charlie and Tomas's hands were giving them the same ultimatum.

As it has been a while since I either shore dived or had to wear a dry suit (I need an 18kg weightbelt!) my body was threatening to join my hands by the end of the first day (that's how it should be said properly, by the way. Not 'by then end of 'day one").

After a couple of pints of Guiness in the evening in the compulsory in every town abroad 'Oyrish' pub and an excellent seafood meal in one of the many excellent restaurants in Keflavik we both agreed that the diving had more marine life than the UK but at nearly 6° colder it was offering little encouragement to spend good money getting more marine life in colder water. "Ah well, we're here now" we said. Let's see if it gets any better tomorrow. Little did we know what was in store.

Wednesday dawned and Tomas was in a good mood. In recent years he had tenaciously formed a local PADI Project Aware activity which had expanded successfully in his "Blue Army" - a group of local volunteers who clean up beaches and remove tons of scrap tipped into the sea at various vantage points. His "Blue Army" had taken on another sponsor that day who provided much needed funds to contine and expand the campaign. Unknown to us, Tomas's good mood was also caused by the inner knowledge that he was about to blow our diving socks off with today's diving. Silfra cracks is just over an hour's drive from Keflavik. We loaded the Toyota Hiace with everything we needed for the day including a small flask which we presumed was Tomas's coffee. Little did we realise that this flask would help us last the maximum time in the water which was 2°C.

We had heard Silfra cracks was a great dive but we just weren't prepared for just how great a dive it



*(Top) A sample of pure fresh water from Silfra Cracks was the perfect addition to our nightly celebration with a glass of Laphroaig*
*(Left) A diver is essential to give a sense of scale.*
*Nikon D70, Subal housing, Nikon 10.5mm fisheye. F5.6 on Auto. Preset white balance. Available light*

is. Our anticipation wasn't dampened by having to lug all our gear about 50 metres to the access platform. We were intimidated by the thought of the water being just 2°C. That's just 2° from when it starts to solidify, remember.

All fears melted away as we looked down into the still water at the beginning of a 5 metre wide crack. It was prefectly, perfectly clear. I had never seen such clarity.

As we slipped into the water, despite a good dry suit and undersuit, hood and gloves it still took our breath away. The pain on our unexposed cheeks (face cheeks, that is) was headacheingly intense. Fortunately this soon faded as we started our dive swimming along the narrow, boulder strewn crack. Our eyes widened as we took in the enormity of the scene but I'm sure I heard Tomas chuckling into his demand valve. He knew we were being blown away with the starter course and he had a main course

*(Above) On a calm sunny day the dazzling colours and rock formations reflect in the still surface water*
*(Left) Charlie Hood with one hand on America and the other on Europe. Both shots Nikon D70, Subal housing, Nikon 10.5mm fisheye. F5.6 on Auto. Preset white balance. Available light*

up his sleeve which would top that several fold.

After about 10-15 minutes we went over a series of small boulders and into a steep sided ravine but as we looked forward we could see a steeply sloping sand bank rising up to meet the land. As we were shallow I surfaced to see how far away the land was and was amazed to see it was well in excess of 50 metres. Absolutely unbelievable. This is Silfra Hall.

All the while Charlie and I were clicking away with our 10.5mm full frame fisheye lenses on our Nikon DSLR cameras. The tonal range from surface to 'seafloor' was usually too great for the digital cameras to cope with but as long as we kept the surface out of frame it was mostly OK.

We had planned to finish the first dive at this point rather than swim back into the very slight current. All of our hands were once again

***Tomas Knutssson founded and runs The Dive Centre in Keflavik. This is a very well run PADI facility just 5 minutes from the airport. In addition since 1995 he has worked tirelessly to clean up the Icelandic environment under the PADI Project Aware and has formed The Blue Army group to clean the coastline. It has removed over 42 tons of debris dumped in the sea from pier ends and other access points. He has received numerous awards and also runs a youth programme Kids Aware.***

revolting (well, you know what I mean) so we surfaced into the pleasant 10°C land temperature and then took our scuba gear off and carried our tanks about 200 metres back to the Toyota to eat and, more importantly, pour the contents of Tomas's 'coffee' flask into our gloves. This was, obviously, just hot water and the effect was orgasmic. We had successfully negotiated with our hands to let us go for another dive.

After another 200 metre walk back with a fresh tank we were well knackered but warm in our dry suits. Suitably kitted up Charlie was the first to dive. He surfaced almost immediately and took the good Lord's name in vain quite loudly. "You've just got to see this" he said excitedly. We were kitting up next to 'Silfra Lagoon'. On the surface it is a circular area of water bounded by gently sloping land. Underwater as we ducked down we were treated to the most amazing scene I think I have ever seen. The colours were breathtaking, the clarity seemed infinite and the surface reflections were to die for.

Great care is needed to avoid kicking up the fine silt with your fins but fortunately there is a slight but constant outward current which cleans the site remarkably quickly.

Swimming back the way we had come gave us another angle of view to expose yet more shots on. The sheer scale was difficult to capture without a diver in shot so we took it in turns to take shots so we had two divers in frame. The day was cloudy but the diffused light help keep contrast levels down.

The swim back took about 30 minutes by which time our hands were up to their usual tricks so we were exhausted but extremely pleased to be climbing up the metal steps to the dive platform.

Now at this stage, you have a choice. The first is the most tempting - namely get this heavy gear off my back asap and I'll come back and collect it later when I've changed. The second choice is more painful but quicker in that you keep everything on and tramp back to the truck. It's up to you.

That evening Charlie and I looked at our shots on the laptops and we were pleased with them for a first attempt but gradually we both began to think that we had not maximised the potential of the site and a slightly different dive plan was needed.

The next day Tomas smiled again as we asked him to reschedule the rest of the trip to go back to Silfra as many times a possible.

Charlie had come up with a good idea to maximise our photographic potential at this site. He suggested that on the first dive he would take photographs and I would model and vice versa on the second dive. This would leave the photographer to concentrate on his shots with a dedicated model. The plan worked very well and all shots in this article were taken on this day.

We also rethought our dive plan to avoid the 200 metre and back tramp with our cylinders between dives. This time we snorkelled out to the best location and then continued our dive with plenty of air left to swim back to the platform.

The cracks at Silfra are without doubt a world class dive site. True, the water is very cold indeed and access is not ideal but this is but a minor negative rewarded by stunning scenery in water which must be some of the purest on earth.

Now I've left this last bit of information til now in the hope that readers will have drifted away and to save Tomas from an avalanche of e mail bookings. Keep it to yourself, but from London you could dive the Silfra Cracks in a weekend! Iceland Express have daily flights from Stansted (and Copenhagen and Frankfurt as well). Their flights start from £68 one way and the flight time is only 2.5 hours.

In addition there is comfortable accommodation at Hotel Keflavik and several good restaurants in the town so there is no need to hire a car unless you want to take in some scenery.

Finally, no visit to Iceland would be complete without a visit to The Blue Lagoon. This is a geothermal Spa where you can enjoy bathing in

water at 35°C and it is known for its positive effects on the skin. It is the most visited attraction in Iceland and is well worth a visit.

And finally finally we went on a whale watching trip on our last morning. This was a two hour cruise looking for minke whales and dolphins. I think they were on holiday that day but we didn't care. We were still basking in the wake of the Silfra cracks.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# Vive La Difference

## By Alexander Mustard

In the last issue of UWP I wrote a first impressions review of the new Nikon D2X and said I'd report in my field experience in this issue. In short, the camera is superb and its image quality exceeds that of all other Nikon digitals and also the best slide film, and by quite a margin once that film has been scanned. On a personal level, the D2X means I no longer have a reason to expose film. For me the digital debate, the question of whether digital is as good as film, is concluded.

That said, I always thought that the digital debate was barking up the wrong tree. People seemed far too concerned about taking exactly the same shot on film and digital and seeing how each performed. Instead we should accept both are now capable of producing excellent quality results. More importantly we must learn that digital IS different from film. Understanding and then exploiting the differences offered by this new technology is the big issue of digital. The key to exploiting digital is NOT just to repeat the images we took on film. What is exciting about digital is the ability to shoot in new ways and create types of images that were impossible before. Vive la difference!

So instead of going on about how great the D2X is. Its arrival makes it timely to review a couple of the ways the techniques of underwater photography have evolved in this digital world. I'd like to give more examples, but I only have space to touch on two areas of digital imaging and discuss how they have changed the way we shoot. These are post processing and first the LCD screen.

The simple LCD screen on the back of a digital camera offers a variety of examples of how the techniques of underwater photography have evolved. With a compact camera we no longer have to hold the camera to our eye, we can shoot with the camera out in front of us, reducing the critical camera to subject distance, or place the camera level or below subjects when there isn't room for us to fit.

Far more importantly the LCD is crucial to the technique of digital photography because it allows us to critically review our images while we are in the water. Image review has two main benefits to the quality of our pictures. First we can adjust our settings until we produce increasingly polished results – this constant review and optimisation during shooting is key to the technique of digital photography. To exploit the technology to the full we should examine focus, depth of field, exposure, lighting and composition, refining each until we nail the shot. Then second, armed with the knowledge that we have bagged the classic shot it is time to experiment. Success in the LCD screen should encourage us to try different camera angles, different combinations of aperture and shutter speed, different compositions – basically looking for images that offer something new.

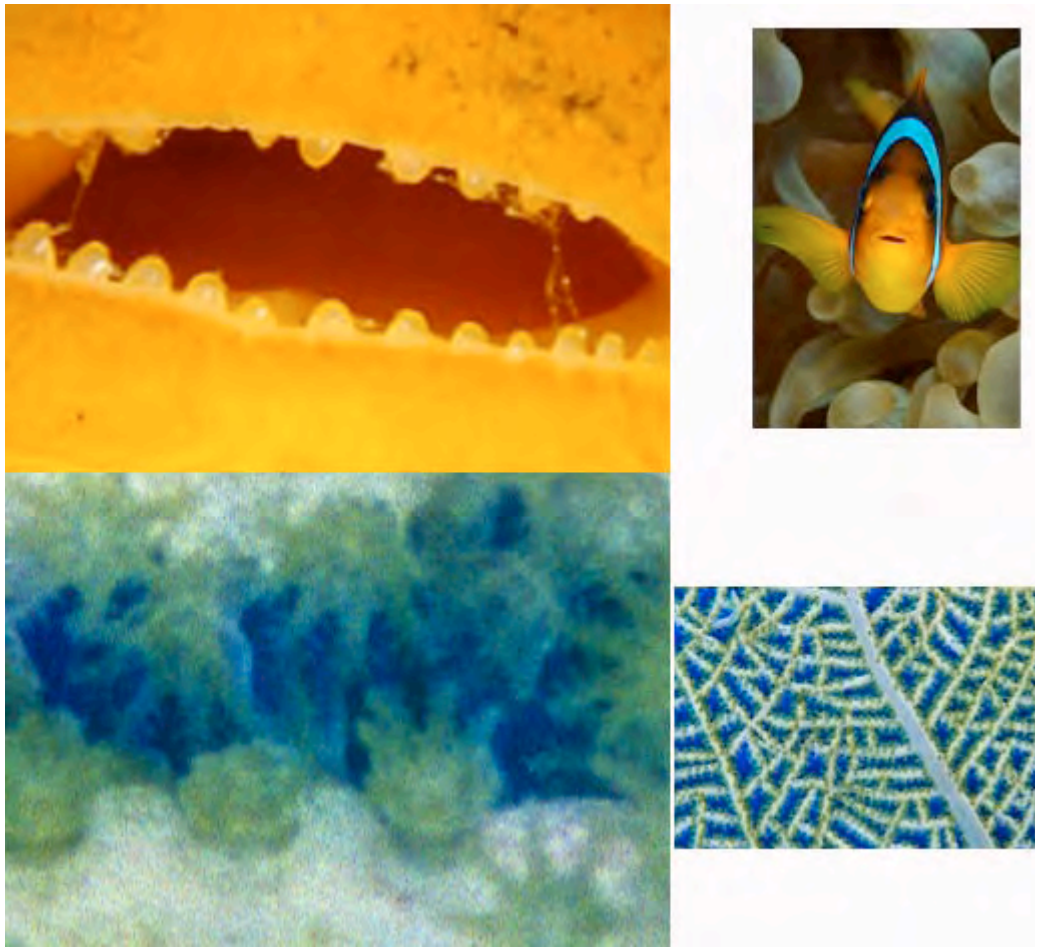
One of many possible examples is refining the classic theory of complementary colours. This theory states that for the greatest impact a subject should be set against a background colour of contrasting hue (a colour from the opposite side of a colour wheel). Complementary colour theory is nothing new; Vincent Van Gogh once wrote "I am thinking of decorating my studio with half a dozen pictures of sunflowers, a decoration in which the raw or broken chrome yellows will blaze forth on

*When we are aware of what can be achieved in post processing it can change the way that we take images. This image would be impossible to produce in camera, but I was able to show the model the finished picture later on during the same afternoon. Nikon D2X + 10.5mm, Subal Housing, f4.5 @ 1/640th.*

*The LCD screen should encourage you to experiment once you have the standard shot. Once I had taken the standard left hand image of the pygmy seahorse I chose to extend my exposure to create a blue background version, right. Nikon D100, Subal Housing. 105mm +4 dioptre. Left f32 @ 1/180th, right f32 @ 1/15th. Subtronic Alpha and Inon Z220. This shot was hand held.*

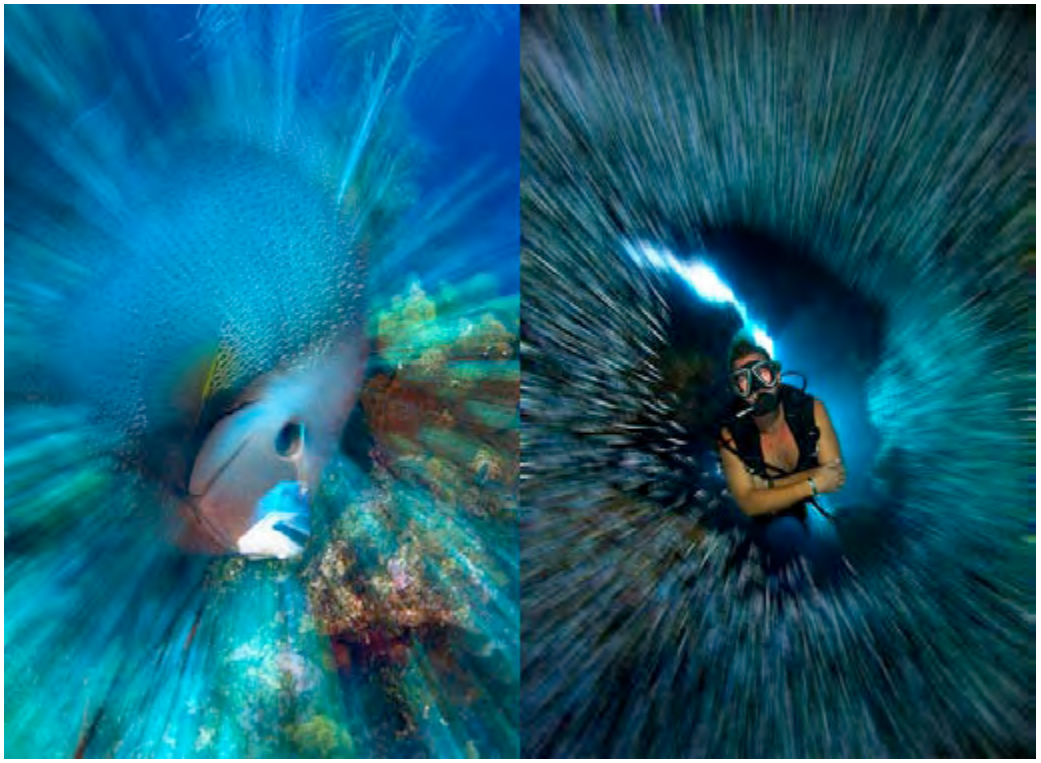
various backgrounds of blue, from the palest malachite green to royal blue". And underwater photographers have followed suit, setting warm coloured subjects (red soft coral, orange sponge, yellow seafan etc) against cool blue water. The LCD screen simply allows us to assess how these colours are working together and adjust them until we get the perfect match. Foreground colours are hard to change, but we can control the hue of blue water with our shutter speed – an underexposure gives us a deep blue and an overexposure and vibrant cyan – until it becomes the ideal compliment.

Furthermore we are not the only ones who can benefit from the LCD screen. When working with models the LCD screen is a massive benefit allowing the model to see exactly



*Comparing the resolution of the D2X and scanned Velvia shot with the same lens. The Velvia has been scanned with a Nikon Coolscan 5000, the resulting file (55MB TIFF) is about 20 megapixels. The D2X file is smaller 12 megapixels, but I have uprezzed it in Photoshop using Image Size to 20 megapixels. Then crops of the images are presented at 100%. It is clear that the digital camera captures more and shows it more cleanly that the slide/scanner combination.*

how they appear in the final image. I don't usually have the chance/finances to travel with a dedicated model and often end up working with the dive staff at the places I visit. I cannot overstate how useful I have found the LCD screen in turning first time underwater posers, into the perfect



*The LCD screen helped me get just the right amount of zoom blur on the picture of the angelfish (Nikon D100, 28-70mm, f13 @ 1/10th, Subtronic Alphas). But in this digital age we must question whether my precious time underwater might have better spent adding the zoom blur in Photoshop as in the diver picture (Nikon D100 + 10.5mm, f8 @ 1/90th, Subtronic Alphas).*

*The challenge with digital is not to master the new methodologies of digital, but to try and exploit them to create images that could not be created with conventional techniques. In this image I have tried to utilise the characteristics of filter photography to achieve an image with colour penetration that would not be possible in a flash lit image. Nikon D100 + 12-24mm, UR Pro CY filter. Subal housing. F4.8 @ 1/40th.*

models. The LCD also includes them in the process, and makes the whole experience much more fun.

Post processing can obviously be used to correct the mistakes we make when taking pictures. But it is far more powerful tool when we are inspired to change the way we shoot underwater knowing what is capable in post processing. This is important because it allows us to create images than cannot be produced in camera. Peter Rowlands' panorama article in this issue is a perfect example of this approach. Creating a final image that combines a thought that encompasses several presses of the shutter.

It is not by whim that David Doubilet's great book is called "Water, Light, Time". For the underwater photographer is always running out of time. Time with our subjects is perhaps our most precious commodity. To fully exploit digital we should be aware of what can and cannot be achieved more easily in post processing, and manage our time underwater appropriately. For example perfecting an exploding zoom image may take 10 minutes out of a dive – so why not achieve the effect in Photoshop? Integral to this approach are the ethics of digital manipulation. Personally I get far more pleasure from an image I created in camera, but we must be careful not to stick our heads in the sand as the world changes around us. I must add that I find digital manipulation far more palatable when it is used, such

***Complimentary colours. With reference to the colour wheel I selected a dark blue water colour (underexposed) to accompany the yellow sponge and a cyan water to go with the orange frogfish. Both Nikon D100, Subal Housing.***

as in compositing, to create an image that is clearly impossible to produce in camera.

The easy mistake to make with post processing is to think it is a cure for all woes. Dave Lloyd, the art editor of DIVE magazine who regularly coaches on Photoshop, refers to Adobe's finest as "Photoshop The Destroyer" since all manipulations act to remove data (and to some degree degrade final image quality). Significant colour correction and manipulation as well as cropping etc all reduce your final image quality and should be done in moderation.

Probably the best area for exploiting post processing software lies in the flexibility of RAW files. Many people shoot RAW because it allows them to optimise exposure after taking an image, but what really gets the creative juices flowing is being able to adjust your film's colour balance and contrast after shooting (with minimal loss of image quality). Armed with the knowledge of what RAW can achieve we can get back into the water and shoot photographs that weren't possible or practical on slide film.

Traditionally, telephoto lenses have been considered unsuitable for underwater photography because shooting through too much water means the resulting images lack contrast, clarity and colour (except for blue that is). RAW files and good RAW conversion software is an effective way to overcome these problems allowing us to adjust the colour balance and inherent contrast of our "film stock" to compensate. From an ethics point of view I find this acceptable because all we are doing when manipulating RAW is taking decisions away from the camera (or its programming) and giving them to the photographer. Now we can exploit the different perspective that these lenses offer.

A second example is available light photography with filters, which can produce stunning results when the colour balance is fine tuned with the appropriate RAW conversion software (as has been discussed in several articles in UWP). Remember that the advantage of RAW is that if such significant manipulations are made on JPG or TIFF files in Photoshop it introduces unacceptable noise levels.

I'm afraid I have only had space in this article to scratch the surface of life in this new digital world. The real challenge to the photographer is not grasping the methodologies, but in coming up with images that exploit the new technical possibilities in creative ways. Filter photography, for example, allows us to add colour to our images in a completely different way to shooting with flash. No longer is colour limited by strobe aiming and the inverse square law. Its is our job to devise new types of underwater images that exploit this colour penetration away from the camera.

After years of being limited to the same handful of classic techniques, suddenly the world of underwater photography has changed. Of course digital cannot break the laws of the physics (of light underwater), but we are certainly empowered to bend the classic rules of underwater photography. These are exciting times with novel techniques and new ways of shooting waiting to be discovered. Surely there has never been a better time to be an underwater photographer.

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# A new look at macro lighting

## By Aaron Wong

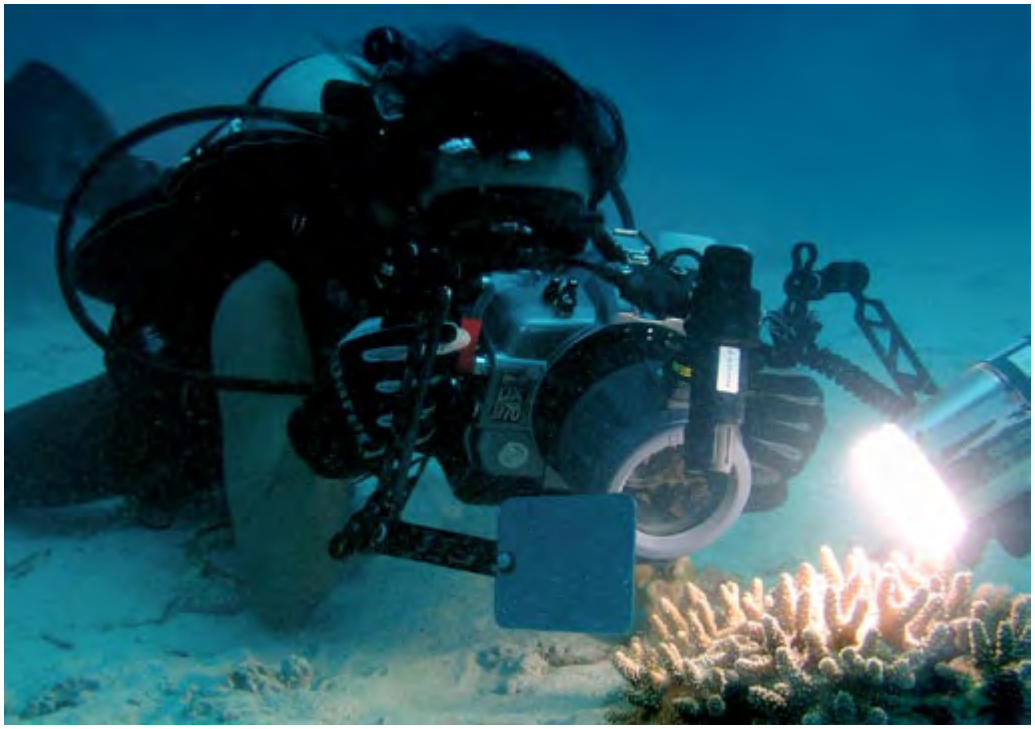
As we all should already know, strobes produce white light (5400 to 5600 Kelvin), and we use strobes underwater for two main reasons. To illuminate an object, or to replace colors that would otherwise be absorbed. It's as simple as that, or is it? As a commercial photographer, I've spent nearly a decade lighting my subjects from every physical angle possible and there's a lot more to lighting than meets the eye.

The truth is, there are many techniques commercial photographers use to achieve those glossy product advertisements you see in magazines (think about those 'mood' shots of hand phones and watches) They were of course done in a studio, but here's the question. Why can't we use some of the same approach in underwater photography? Besides it's size and output, studio strobes are no different. They all produce white light, it's how we use them that makes the difference.

With that in mind, I would like to share with you two simple lighting techniques commonly used by commercial photographers called 'bounce' and 'cutting'. It's nothing new to photography, just that it's hardly been used underwater. (Even if some divers do use them, they are sure as hell are not sharing the secret!)

### BOUNCE LIGHT.

As the name implies, you basically 'bounce' the light from your strobe. Light travels in a straight line, and when it hits a reflective surface it bounces back. I've developed a bounce plate that does just that. (Well, develop is a big word to use for such a small thing!) A bounce plate is basically a small piece of metal or plastic (your slate would work fine.) that is used to reflect the light back to the shadow areas that would otherwise be too dark. You simply place the plate at the opposite direction of your strobe, e.g. if your strobe light is coming from the right, place your plate on the left side of the subject. Your strobe in this case is the key light and the bounce becomes



*Here's a picture of the bounce plate in action. Notice how the bounce plate fills in the shadow areas created by the strobe on the corals. The areas that did not receive the bounce remain quite dark.*

*I shot this nudibranch with 1 strobe and a bounce plate placed on the right. The matt side is used to produce a soft fill. Equipment: Nikon D70 in a Sea n Sea housing with 1 YS 90DX, bounce plate and 60mm macro lens Exposure: 1/125 at f22*

***The extreme close up of this shot made it possible for me to bring the bounce plate a lot closer (about 1.5 inches) without it coming into frame. I was able to get quite a strong fill with the polished reflective side of my bounce plate.***
***Equipment: Nikon D70 in a Sea n Sea housing with 1 YS 90DX, bounce plate and 105mm macro lens***
***Exposure: 1/125 at f32***

something like a fill. (This is great for those who only have one strobe.) The softness of the bounce can be controlled by using different materials. A white plastic (like your slate.) gives a soft fill while a reflective piece of metal would produce a much harder bounce.

The challenge is to get the plate in the right angle. (It's like trying to reflect the sun into your friend's eyes with a mirror!) The trick is to get close. We are talking about macro photography here, so get as close as you can. I usually place my plate about 3 inches or less from my subject. At this distance, a matt surface plate would give you a fill of about 1.5 to 2 stops under from your key light. That will give you an nice overall exposure, but you can always move your plate further back for a

***This shot was done with a single strobe (from the right) and a larger bounce plate. (about A5 size, from the left) The larger plate created an even fill over a large area. I was also able to position my bounce plate in between the sponges to get a proper fill. Something a strobe can't always do.***
***Equipment: Olympus C5050 in Olympus PT-015 housing with 1 YS 90DX and large bounce plate.***
***Exposure: 1/125 at f8.***

darker shadow.

Now for the 'mood' kind of lighting we talked about. (Remember those watch and hand phone ads?) The best way to achieve this is to do flash dominated shots. That means all the light you see in the picture comes from your strobe. Leave the ambient light out. (Just like studio shots, ambient light is hardly ever used.) The trick is to use a higher f-stop, (f/22 and above or whatever your camera can support.) and a faster shutter speed. (1/125 or faster, depending on what higher speed your camera can sync.) With settings like these, ambient light is almost non-existent, so you will need a strobe with a little juice. The YS 90 by Sea & Sea is great. Smaller strobes work just as well but you have to get them closer. Remember the key word in macro… Closer!

Getting it right takes a fair share of trial and error. Not a problem for digital users, but to those good old film guys, all I can say is 'good luck'! Take a few shots at different plate angles. Remember, a few frames is a small price to pay for a great shot. Or better still try it on land or in a pool just to get a feel for it. Trust me, you don't want to waste precious time figuring it out while diving in the Maldives!

For the lazy few, you can drill a hole and mount your plate on a separate arm, but that means you'll have to spend on another arm set and they don't come cheap! Or you can keep it in your BC pocket and hold it in place by hand when needed, which is what I mostly do. In fact I find it easier as it gives more control. Success in using the bounce plate also depends a lot on the situation. If the position of your subject allows, use it. If not don't move the subject or damage the reef in your attempts! The technique works best in flat or open areas where you have room to move. As for choice of subjects, well basically stuff that moves slowly or better still doesn't move at all! A nudibranch is the best candidate! Lastly, you can experiment with different materials. I find that an aluminum plate, polished on one side and matt on the other works best. You can use either side depending on how hard you want your bounce to be and aluminum doesn't rust!

There are several advantages for using this technique. The obvious one is of course cost. I'm sure a small piece of aluminum is a much smaller investment than a second strobe! Besides that, it is also ideal for situations where you simply have no

*The key word in this shot is separation. I used to taped up strobe for this one. The subject was sitting on a protruding edge of a rock, which made it easier for me to cut the light away from the background. As both strobes are taped up, it took a while to get them both in the right position.*
*Equipment: Nikon D70 in a Sea n Sea housing with 2 YS 90DX, and 105mm macro lens Exposure: 1/60 at f22*

*This shot was taken with the main strobe taped up. I used the edge light of my second strobe for fill. Good separation created the 'wow' factor in this shot. Without the isolation and shadows, the subject would not have stood out as much in the picture. Of course it took me a while to get the spot in the right position. I took 13 frames to achieve this picture.*
*Equipment: Nikon D70 in a Sea n Sea housing with 2 YS 90DX, and 60mm macro lens Exposure: 1/125 at f32*

room to position your second strobe. (Imagine a nudibranch hiding against a big rock!… I've lost many good shots to big rocks!) Lastly, you don't have to worry about balancing your fill. Those using 2 strobes will tell you it can get a little tricky controlling the output of both strobes. With a bounce plate, you only worry about 1 strobe. Once you get the exposure right on that, a well-placed bounce would 'fill in' the rest (1.5 to 2 stops under from key light.) So give it a try on your next dive, you'll be surprise what a big difference a small bounce plate can make!

## LIGHT CUTTING.

Light 'cutting' is a term commonly used in studios. As simple as it sounds, cutting light basically means to block / cut the light out of the picture. This is usually done with a piece of black wooden or foam board held in front of the light source to create shadow areas. These black boards range from small A5 sized pieces to large 8 X 4 feet ones and are known as (you guessed it) 'cutters'. Photographers mostly use cutters to create mood shots with lots of shadow play, to isolate light to one point, or even just to block flare from going into the lens. So as you can


*Picture of taped strobe (left) and bounce plate (right).*

see, cutters are useful and they are no secret to studio photography but like the bounce technique, few underwater photographers use it.

The main use of cutters underwater is to isolate light to one point, to aim light at where you want it (on your subject of course!) while leaving the rest of the area dark. This is useful in creating the 'mood' shots that we have been talking about. Imagine a brightly colored shrimp on a brightly colored coral. It will be hard to achieve good separation if you just use the full coverage of your strobe to light up the whole area. Sure, you'll get your well exposed shot of the shrimp but it will be lost amidst the busy background. In short, you lose the 'wow' factor because your subject doesn't stand out.

One sure way of achieving good separation is to limit the light only to your subject area. Here's where cutters come in. Don't worry, I'm not asking you to bring black boards underwater! A roll of black duct tape would do the trick. You simply tape up your strobe leaving a hole about 1 X 1 inch wide. The size of the hole depends on how isolated you want the spot to be. (Bare in mind the smaller the hole, the harder it is to accurately aim your strobe onto your subject.) Of course a spot adapter would do the same thing and I know of strobe makers who produce them, but I can assure you they cost a lot more than duct tape!

To create good separation with lots of shadows and mood we once again rely on strobe dominated shots. Balanced light pictures don't usually work when you want to separate your subject. No point trying to isolate your strobe only to have the shadow areas filled in by the ambient light. With that in mind, the same high f stop (f/22 and above if your camera supports) and fast shutter speed (1/125 or faster) applies. Accurately aiming your strobe takes a little experience. Due to the taping up of your strobe, high f stop and fast shutter speed, a poorly positioned strobe would leave your subject totally in the shadows. So take your time to get it right. Remember, those pictures you see in magazines didn't happen within 1 frame, taking more than 10 frames for 1 good shot is not uncommon.

For those using strobes with detachable diffusers, I would recommend getting a spare. Duct tape one and keep the other in your BC pocket or strap it to your strobe arm. That way you can easily change your set up when the right subject comes along.

I hope these two simple techniques will help you achieve some great shots. As I said, they are nothing new to photography, just that few of us thought of using them underwater. Now that you know them, the least you can do is give it a shot. Duct tape and small metal plates are not huge investments, but you will be surprised how something that simple can produce great results. Enjoy!

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# Cuttlefish Conundrums

## by Mark Webster

Spending long periods working away from home, in Angola currently in my case, makes the heart and mind yearn for a spot of UWP in temperate or tropical waters. I had been keenly anticipating a month at home in August with visions of brilliant summer sunshine and calm seas around the Atlantic coast of my home in Cornwall UK. Anyone who spent the month of August in the UK this year will know that this vision was shattered by high winds and heavy rain with scant opportunity to get into the water let alone concentrate on photography. The few times I ventured into the water I was faced with heavy swells and poor visibility due to freshwater run off and plankton blooms.

I was keen to play with my new digital toys and beginning to despair that I would produce any images let alone find interesting subjects. Living on the coast fortunately gives me the choice of choosing to dive as soon as the conditions allow and I am lucky enough to have a splendid beach dive just ten minutes from the front door. The area has a variety of reef and sand/gravel habitats and has been known for sightings of Atlantic trigger fish and even spiny seahorses. In the summer small forests of boot lace seaweed reach towards the surface and are a good hunting ground for a variety of marine life, even when the visibility is poor.

A gap in the low pressure weather systems brought an opportunity to make a dive and I was in that water in a flash. Hoping for better visibility than I found, I had armed the D100 with an 18-35mm zoom, but the visibility transpired to be a murky 2m at best. I decided to explore the bootlace weed forest for thornback rays or grey Atlantic triggerfish, frequently seen here in late summer, and hope to get close enough for a clear picture. Moving slowly through the weed I encountered nothing of the sort, but when I stopped for few minutes I soon became aware that I was being watch by more than one pair of eyes.

Slowly through the gloom appeared one, then two, then four and then finally six cuttle fish ranging in size from 15cm to 30cm. Although they were showing a healthy interest in me initially they were staying on the limits of visibility, particularly the larger ones, which was no good for

*Nikon D100, LMI Titan housing, 105mm macro, Inon quad flash, f8 @ 1/60, 200ASA*

*Nikon D100, LMI Titan housing, 105mm macro, Inon quad flash, f8 @ 1/60, 200ASA*

*Nikon D100, LMI Titan housing, 18-35mm zoom, two Subtronic Mini TTL's, f8 @ 1/60 200ASA*

photography. Eventually I decided to just move gently towards one of the smaller cuttle fish which seemed a little less wary than the others. Over many agonising minutes it eventually let me get within 30cm and I was able to fire off a couple of shots.

It soon became apparent that this cuttle fish wanted to co-operate and he (making a sexist assumption here) began to go through his camouflage and texture repertoire whilst apparently signalling to me with a number of arm movements. As this was progressing I also noticed that a number of sand gobies were hopping in closer to have a closer look at the pair of us - big mistake on the sand gobies part! In an instant the cuttle fish struck, almost too fast to see but I did detect a change in colour and behaviour just before he made his move

He began to move off slowly across the weed and gravel obviously intent on finding further candidates to satisfy his appetite. It was plain that he did not object to my presence or close attention - I had my dome within 25cm (6") of the cuttle fish as I tracked him through the viewfinder. Using the 35mm end of the zoom gives the equivalent of a 50mm and a plus 4 diopter will get you very close indeed.

I watched him strike a couple of more times and realised that there was a distinct behaviour pattern which indicated when he intended to strike and might enable me to capture the moment. Immediately after a strike he would remain motionless over an area of weed and attempt to match his colour to the surroundings whilst increasing the texture of his body to the classic warty appearance whilst raising and waving his two centre tentacles - at me? After a couple of minutes he would move off slowly aiming for a likely gravel patch which the sand gobies would favour. Hovering at the edge we would wait patiently wait for a potential victim. It soon became obvious that this cuttle fish was not merely tolerating me, he had deduced that the gobies were coming closer to investigate me and so I was helping him with the hunt!

As one or two approached the cuttle fish would gradually lose his texture and extend his tentacles into a funnel. His colour would gradually fade more and more towards a pale beige colour and his head would extend slightly from his mantle. Next his 'striking arms' would just begin to emerge and I then knew that the strike would happen at any instant. This was the difficult part - predicting when he

*Nikon D100, LMI Titan housing, 18-35mm zoom, two Subtronic Mini TTL's, f8*

would strike and pressing the shutter at the precise moment to catch the action. Needless to say I had many failed attempts - but the joy of digital is of course that you have a huge number of frames to play with and of course you can see immediately if you have missed! If it is truly awful then just delete it and try again.

The D100 has an almost imperceptible shutter lag and in most instances it appears to be instantaneous. This in fact proved both a blessing and a disadvantage with some of my shots. The best turned out to be those that I managed to fire just at the beginning of the strike and then the short delay caught the strike at the crucial moment. Many attempts produced perhaps three or four satisfying shots and whilst the cuttle fish was happy to carry on stalking, I was running low on air and needed to fin slowly back to the shore to clamber out over the rocks. However I was immensely pleased at having captured a behaviour I had rarely witnessed before.

Although cuttlefish (Sepia officinalis) are very closely related to the octopus, the most obvious difference between them is that the cuttlefish has maintained more of its mollusc ancestry with its substantial internal 'shell'. This is the cuttlebone which are often found washed up on the beach and used as a source of calcium carbonate for caged birds. The 'bone' is in fact a mass of porous cells which enables the cuttlefish to control its buoyancy without having to swim actively - rather like the buoyancy tanks of a submarine.

Cuttlefish hunt both during daylight and night hours and when resting are often found partially buried in the sand. During the spring and early summer months breeding cuttlefish are found together in groups 'courting' before mating. When they are engrossed in this, a close, but cautious approach can often be made to watch the males changing colour and pattern to attract a potential mate. Like the octopus a specially designed tentacle is used during mating, the eggs are then laid in clusters attached to seaweed and eel grass in the south west - these are sometimes referred to as 'sea raisins' due to their shape and dark colour.

The cuttlefish is a more efficient swimmer than the octopus using a combination of its siphon, skirt like fins and adjustable buoyancy. They normally prey on small crabs, prawns and fish and have two long 'striking' tentacles with sucker pads on their ends which are shot out in a fraction of a second to snatch their prey. They also have remarkable eyesight and in fact can see both backwards and forwards, useful for hinting and avoiding predators.

Cuttlefish are most often found in Spring and early Summer on shallow reef areas where there are fine sand patches, or close to river estuaries where there may be sea grass beds. Once found their behaviour is difficult to predict. Some are very inquisitive and will emerge from a sandy burrow to touch and explore an extended hand whilst others will jet off immediately in a cloud of ink.

As with all motive subjects in underwater photography patience is the key to capturing natural behaviour. Sometimes you can be lucky with a chance encounter but for mostly you need to be prepared to try and stay motionless for long periods waiting to see what will happen. Occasionally it will pay off!

**Mark Webster**
**www.photec.co.uk**

**Mark is the author of 'The Art and Technique of Underwater Photography' (published by Fountain Press) and Diving and Snorkeling Belize (Lonely Planet) and hosts regular workshops overseas.**

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# 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!

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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| Jan/Feb Issue | Deadline 28th December |
| Mar/Apr Issue | Deadline 28th February |
| May/June Issue | Deadline 28th April |
| July/Aug Issue | Deadline 28th June |
| Sept/Oct Issue | Deadline 28th August |
| Nov/Dec Issue | Deadline 28th October |

# Parting shot

I have always enjoyed photography and finally made the leap to digital a couple of years ago. The flexibility of being able to delete and easily store images was the main motivator for the move.

Before I had a digital camera, I went to the Coral Reef on my first scuba dive and bought a Kodak underwater camera. I was so excited to get the pictures back and so disappointed with the results. The colour wasn't there and I'd missed most of the shots I wanted to capture.

Things move on and digital cameras have become smaller (I have a Cannon EOS and my wife and Cannon IXUS 500) and the quality is much better than before. In February this year I took my family to Eilat and was keen to not only go scuba diving and get some better pictures, but also to capture my son Adam's first time in a swimming pool. I soon realised that it would be impossible to get a housing for the EOS, so I started looking for one for the IXUS. I was delighted to find that they were actually quite reasonable in price at around £150 from Ocean Optics.

I managed to get two amazing shots. One was of a dolphin swimming towards me ready to head butt me. Just before it swam past she turned her head and smiled for the camera and I have a beautiful close up as a result. The second, and perhaps more unusual picture is of Adam in the swimming pool. I'd been experimenting doing split shots in the pool earlier in the week and never thought I'd be able to pull it off (specially with such a limited camera).

Taking the shot was tricky. Adam was just 4 months old and had never been in a swimming pool before, he wasn't even (and still isn't) sitting up by himself. My wife and I had him in the water for about 5 minutes and he was enjoying the feeling so we just kept pushing him through the water. Before we got him out, I said to Karen that I wanted some last shots of him in the water and started taking the split-level shots. I needed to keep most of the camera in the water and most of my face out of the water to make funny faces at Adam. The final result, about 5 shots later, is the one you see here.

Sometimes when you don't have the time to set a picture up you'll end up getting some great results. The colours are fantastic, the contrast between the water and outside works perfectly and the model is drop dead gorgeous! We love the picture so much that it's been blown up and put in the bathroom so Adam can remember his time in the great big bath of Eilat!

My wife thought I was mad spending £150 on an underwater housing for her camera that I'd only use a couple of times, and maybe she's right. However, I'm so pleased I spent the money as I have some great pictures that there is no way I would have got with a cheap disposable.

**Rob Galkoff**
rob@galkoff.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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