

# Underwater Photography

Sept/Oct 2010





Ultimate Quality

# X-2 for GF1

Underwater Housing for  
Panasonic LUMIX GF1

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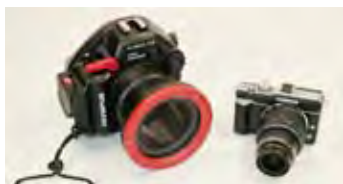
「極」 means “ultimate, finest, extreme or excellent.”

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Cover shot by  
Peter Verhoog

# Underwater Photography

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## Housing design dilemma

For a lot of underwater photographers the advent of digital cameras which can shoot stills and video is without doubt a welcome arrival but for housing designers it represents something of a dilemma.

Until recently, compact cameras have been able to shoot video for some time but the quality has not been full HD. That has now changed with the Sony NEX-5 and there will no doubt be other cameras to come. This higher quality capability will no doubt attract the discerning user but they will be looking for a housing which is ergonomically suited to shooting video as well as stills and the two disciplines require different handling qualities.

I recently shot video with the Nikon D300s and Canon 7D in Nauticam housings and whilst the operation controls for stop/start were well placed ergonomically, the physical act of holding the housing up at eye level to see the LCD screen made it inherently difficult to hold steady. It was a bit like shooting with a 2 legged tripod. Now this is in no way a criticism of Nauticam as all other housing manufacturers suffer from the same limitation which is caused by the fixed position of the LCD screen which needs to be viewed when shooting video.

With the Sony NEX-5 the LCD screen can be tilted up to give a much more comfortable viewing angle and allows steadier handling when shooting

## Editorial



both video and stills. Also, in terms of handling, you need to hold the housing differently when the screen is tilted up. The handles need to be angled forward whereas they are more comfortable in the upright position when shooting with the screen in line of sight. This may seem like trivial detail but it transforms the handling which in turn gives much better results.

The optimal solution is to have the ability to control the screen angle and the handle angle on the housing and then you can shoot both stills and video comfortably.

In the past, manufacturers have designed SLR housings to be used primarily for stills photography

but now, with the advent of HD quality stills and video, they need to build a design which can work ergonomically well with both.

I, for one, am awaiting events with interest.

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

## Readers Lives

### First NAUI now Facebook!

I'm soooo glad to read this in the last issue of UWPmag! I've avoided this competition on purpose for just this fact!!

However, recently I saw something much more shocking than this...Facebook terms pretty well say the same thing! All photos posted on FB automatically grant rights to FB to sell without further permission from the photos owners!!

People of course have complained...but there's just not enough media about this & as it's buried in tons of fine print!

Regards,

**Lawrence Alex Wu**

# News, Travel & Events

## Need your help to stop needless shark killing here in Palm Beach, Florida!

Good Morning Friends,

I need your help please! I am trying to stop the needless shark killing here in my home town Palm Beach. Although this has happened many times at this marina, it was the first time I was in town to catch it, thank god!

Please vote for the video above so this needless killing of an endangered scalloped hammerhead shark will have more impact! If enough people vote it may go to national news which means more support for stopping the needless slaughter of these beautiful creatures that are so vital to the health of our oceans! Feel free to post this everywhere! Below is the actual story with images! Thank you for your help!

At this moment I am very sad to say that the fisherman that did this will not be penalized in anyway, because of a interpretation of the law that makes no sense to me what so ever! If you need to reach me, email is best! Many of you know me very well and know that because I live at sea, swimming with these beautiful creatures everyday year round, I see this horrific act the same way most people would look at your pet dog, left on a cart to die and bake in the sun, as if no one gives a damn! I do give a dam and I hope you do to! Please

GREEN | AUGUST 24, 2010 | 42 COMMENTS  
**Shark Death: A Waste of Life**



On the Shark Task Force, we witness amazing life underwater around the world. When we face the death of something so incredible, the impact is deep.

[http://current.com/green/92627366\\_shark-death-a-waste-of-life.htm](http://current.com/green/92627366_shark-death-a-waste-of-life.htm)



make this count and make a difference! This type of behavior infuriates me and needs to be stopped! Thanks so much for your help!

Save The Sharks.

**Jim**

**Jim Abernethy's Scuba Adventures, Inc.**  
[www.scuba-adventures.com](http://www.scuba-adventures.com)



# World Festival of underwater pictures

27-31 October 2010

Palais du Pharo, Marseille, France

The World Festival of Underwater Pictures will take place for the second successive year at the Palais du Pharo in Marseille, from 27 to 31 October 2010.

Jean-Michel Cousteau will be the honorary president of the 37th World Festival of Underwater Pictures. We will celebrate the 100th anniversary of the birth of his father, Jacques-Yves Cousteau, in presence of those who took part in the Calypso odyssey.

Entries for the 2010 competition are now open. This year a new category will be introduced: the "Photo-Trio". This competition asks photographers to enter three digital photographs without any limitations on style. It's open to everyone, professionals and amateurs, as are all the Festival competitions, but it is aimed more specifically at amateur participants who don't have the possibility of entering a series of ten images each year, as required by the Portfolio category.

The 37th edition of the World



Festival of Underwater Pictures looks promising and its organisation in Marseille is well appreciated by the majority of people. You will find on our site a list of hotels which have agreed special rates for festival goers.

[www.underwater-festival.com](http://www.underwater-festival.com)



## Epson Red Sea Full HD Live Underwater Broadcasts at the Photokina 2010 Fair!



[www.youtube.com/watch?v=g3WJkVMsv2M](http://www.youtube.com/watch?v=g3WJkVMsv2M)

On July 28th, Epson Red Sea has carried out the first full HD underwater live broadcast from the bottom of the Red Sea in Eilat, Israel. It took a whole week to establish the setting, a crew of over 25 professional divers and technicians, 300 meters of High Definition cables and full commitment to an adventurous experience. Once the show was on air, the excitement was indescribable. The first underwater live broadcast testing, in preparation for the upcoming live broadcasts planned at the Photokina 2010 Fair in Cologne, Germany this

September, was successful.

David Pilosof, producer of the Epson Red Sea event, an annual and international underwater photography competition held in Eilat, Israel for six years in a row now, is known for his tendency to come up with surprising, unique and creative ideas, which initially seem almost unrealistic. However, this time he really did it.

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

## Basking Sharks of Cornwall, England- with Mauricio Handler

June 2nd-7th 2011



Photographer, expedition leader and long time National Geographic underwater team member Mauricio Handler will be leading a group of photographers on a 5 nights/ 4 days photo week in search of Basking Sharks off the coast of Cornwall, England. -

British B&B hospitality, a private boat with up to 8hrs on the water each day and Mauricio's technical and creative input should help guarantee a great time and some spectacular encounters and images.-

Cornwall in June is the best place to see the gathering of these giants! Space limited to 5 guests! Non photographers welcome.-

For complete details and bookings contact Mauricio Handler-

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

## GOLDEN TRIDENT 2010 The Nobel of the Sea to the Swiss photographer Jean-Claude Uldry

Jean-Claude Uldry, photographer, videomaker, project author and developer, who lives in Italy, has been awarded the prestigious prize 'Golden Trident 2010' in the sector Technical and Technological Activities on occasion of the 50th anniversary of the International Academy of Underwater Sciences and Technologies. The prize-giving ceremony has been held in Anzio (Rome).

Unanimously considered as the 'Nobel of the underwater activities', this prize stands as the highest recognition of worldwide excellence and is assigned every year to internationally outstanding personalities, institutions and associations.

In the golden book, his name will appear



besides legends such as Jacques-Yves Cousteau, Jacques Piccard jr, Hannes Keller, Raimondo Bucher, Scott Carpenter, Jacques Mayol, and also Walt Disney.

[www.adval.it/uldry.html](http://www.adval.it/uldry.html)

## Shark Diving Expedition In the Bahamas on a Live Aboard



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January 15 - 21st 2011



## Brighton Pier with Maria Munn 23rd & 24th October 2010

Frogfish Photography is delighted to announce that underwater photographer Maria Munn will be joining the final Visions in the Sea Summer Series event in October.

The weekend will be tailored to suit underwater photographers who use compact cameras and Maria will be on hand to give advice and tips to improve your photography. We will be diving Brighton Pier, which is packed with underwater wildlife for macro work as well as excellent wide angle opportunities for those with wet lenses on their compact setups.

Maria Munn has just published "Underwater Photography for Compact Camera Users" and her enthusiasm shines through in her tuition, photography and writing. We will certainly be finishing off the Summer Series with a bang in Brighton.

The Summer Series has been a huge success with divers getting tuition and experience diving all over the UK. We have visited Capernwray to photograph wrecks with Charlie



*Caroline Robertson Brown  
www.frogfishphotography.co.uk*

Hood in Lancashire, seen Seals with Duxy in the Farne Islands, studied Blennies under Swanage Pier in Dorset, Basking Sharks in Cornwall, competed in the NUPG Splash-In in Anglesey, North Wales and just have Brighton to go.

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

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## 2011 Raja Ampat Entrance Tag Design Contest

Win a 10-day trip to Raja Ampat, Indonesia, FOR TWO!



Wetpixel is proud to announce the 2011 Raja Ampat Entrance Tag Design Contest. Enter your best images or graphic designs and have your image printed on the 5,000 park tags that will be attached to the BCDs of visiting divers. The author of the winning design also wins an all-inclusive 10-day dive holiday to Raja Ampat, Indonesia, for two!

The submission deadline is Monday, September 6, 2010. Public voting on finalist images will commence shortly after and end on October 11, 2010. There is no need to wait—enter today!

<http://wetpixel.com/raja>

## A Ray of Hope for Manta Rays in Brazil



Dr Andrea Marshall, also known as Queen of the Mantas from the BBC's 2009 documentary film, has attached a satellite tag to a giant 4meter manta ray off the coast of South America. This ambassador for Brazilian manta ray conservation is the first manta ray in the Southern Atlantic Ocean to be satellite tagged and another first for Andrea, who originally discovered and tagged this second species of manta ray, *Manta birostris*, in 2009 in Mozambique.

The tagging is a fundamental part of a comparative worldwide research campaign called 'Ray of Hope' funded by the Save Our Seas Foundation (SOSF) and conducted by the Marine Megafauna Foundation (MMF), which is investigating the behaviour and movement patterns

of the newly-described giant manta ray. Andrea and colleagues Dr. Simon Pierce and Dr. Juerg Brunnschweiler are travelling to several locations across the globe, teaming up with local researchers or dive operators along the way to locate these mysterious and severely understudied mantas. In Brazil Andrea is collaborating with the Laje Viva Institute and researchers from their 'Mantas of Brazil' project.

The tag was deployed last week on a large mature male at Laje de Santos, the largest documented aggregation site for the *Manta birostris* species in the Southern Atlantic Ocean, and is programmed to stay on the manta ray for 180 days. For the next six months the tag will accompany the manta on its journey through the oceans, functioning like a mini-lab and storing data critical to the investigation. As well as recording the water temperature through which the manta swims and the depths the animal reaches, it also records the light levels and its GPS position every time it breaks the surface, information used in determining the individual's actual track.

The research is funded through the Save Our Seas Foundation (SOSF).



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

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



There are over \$62,000 worth of prizes including over 25 liveaboard and resort packages, dive equipment and much more. Special prizes are 12 days on the Arenui boutique liveaboard, 9 days on the Solmar V liveaboard, 18 nights in Papua New Guinea including a stay on the Febrina liveaboard, a trip for 2 on the SMY Ondina, and a 9 day trip on the Manthiri Maldives. This is one of the largest underwater photography competitions ever to be held in terms of prizes.

The competition has 11 categories, including a Novice dSLR category, and 3 compact camera categories – giving photographers of all levels a chance to win a great prize. Unique categories include Sharks, Nudibranchs, and Divers /

Fashion – a category that will allow pool shots. Other categories include Wide-angle, Macro, Supermacro and Marine Life Behavior.

1st, 2nd and some 3rd place winners from each category will win a fantastic resort or liveaboard package. Winners will be able to choose their own prize, which means they are more likely to end up with a prize that they want.

Judges include world-renowned underwater photographers Martin Edge, Marty Snyderman, Chris Newbert, and Bonnie Pelnar.

Photos must be submitted before the November 14th 2010 deadline.

[www.uwphotographyguide.com/underwater-photo-contest](http://www.uwphotographyguide.com/underwater-photo-contest)

**WETPIXEL**  
QUARTERLY

ISSUE #7

**WETPIXEL**  
QUARTERLY

Dear UwP Readers:

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

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

## Waterworld Images Dominica Sperm whale trips 6-13 and 13-20 of November 2011

We are planning 2 one week trips to Dominica in November to photograph sperm whales. Trip dates are 6-13 and 13-20 of November. 6 individuals per trip, possibility of signing for 2 weeks.

Arrival on Saturday with first day optional diving, followed by 5 days of whale action with in water encounters / snorkeling only. The possibility of replacing the diving day with a whale day exists. Accommodation at 4 Star Fort Young Hotel 7 nights included.

As whale encounter permits in Dominica are issued primarily for research, participants will be requested to provide photographs that document these in-water encounters in accordance with a research protocol presently submitted to the Division of Fisheries in Dominica. These images are 100% for non-commercial



purposes.

Approximate cost \$3000 -\$3700 depending on room single / double occupancy and room upgrades. This does not include airfare.

As we are operating at fairly short notice, 50% deposit will be required initially with Name and Passport information as each individual must be recorded on the permit.

Full payment by October 15th.

Please email me, Jeff Hartog  
[jeff@waterworldimages.com](mailto:jeff@waterworldimages.com)

or see some amazing photos at  
<http://waterworldimagesblog.com/>

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# Underwater Photography Workshops with Sue Daly in the Beautiful Channel Island of Sark



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## MacGillivray Freeman Films Launches “One World Ocean”



MacGillivray Freeman Films is launching One World Ocean, the largest global media campaign of its kind that will literally crisscross all five of the world’s oceans to produce an epic multi-platform series designed for giant-screen IMAX, 3D, 2D & 3D television, theatrical 3D release, digital online media, companion books and other media all designed to reach hundreds of millions of viewers when released in 2015.

Over a span of four years, the \$25-million One World Ocean production will collect amazing images and stories of marine wildlife and mankind’s relation to the sea in forty locations around the

world using today’s most advanced 3D camera system technologies.

The monumental project will offer spectacular entertainment in the award-winning tradition of best-selling giant-screen filmmakers MacGillivray Freeman Films and producer/director Greg MacGillivray, who has produced or directed 36 educational giant-screen IMAX films over a filmmaking career that spans more

than 40 years. A longtime advocate of ocean conservation, MacGillivray has already produced and directed three blockbuster ocean films including two nominated for an Academy Award for Best Documentary Short Subject (The Living Sea and Dolphins).

“We’re excited to be partnering with the world’s top underwater filmmakers to explore the ocean like never before and bring back the most unusual, never-before-seen images from under the sea, all with immersive 3D cinematography. We’ll use underwater submersibles and the very latest in re-breather technology to plumb new depths of

ocean life below the normal limits of scuba.

“If we don’t shake people up now with what’s happening to our oceans, we’re not going to have the same magical oceans left in forty years,” said Greg MacGillivray. “Marine scientists predict that by 2050 there will be no more large fish left in the ocean if we don’t change our relationship with the sea. I want One World Ocean to be a major vehicle for that kind of change. For that reason, I feel more passionate about this project than any others I have ever worked on.”

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

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**Blue water,  
white sharks**  
with Charles Hood  
27th Sept - 4th Oct 2011



Maybe you are a beginner with a relatively modest camera system, alternatively you could be a pro-am with the latest digital SLR complete with custom housing, or maybe you are somewhere in between. You may have already completed an underwater photographic course having gained all the theory and completed a week's shoot in warm waters. You may have got some great pictures and now you want to try your hand at capturing the ultimate image – a great white shark portrait. Let the lessons begin.



Charles, an accomplished underwater photographer and journalist, will make yet another visit to Guadalupe Island to lead this tour, which is his choice for the most photographic and exciting shark encounter on earth. Charles will be on hand for informal photographic discussion and critique. Underwater photographers of all levels will certainly benefit from Charles's knowledge and experience.

Over the past 30 years Charles Hood has captured on film most of the

world's big sharks, whether it be from a cage or free-swimming. Sometimes he only had a few days to get a result, so planning and pre-setup are essential. Of course, nowadays, with the advent of digital technology, we can review the images we have taken after each dive, but understanding the characteristics of the picture is vital.

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

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PHOTO: MARTYN GUESS

# President José Ramos-Horta announces the inaugural International Dive Photo Contest of Timor-Leste

October 9 -15th 2010



President of Timor-Leste and Nobel Peace Prize Laureate, José Ramos-Horta, has announced the inaugural International Dive Photo Contest of Timor-Leste. The event will run from the 9th till the 15th of October, 2010 and is a unique 4 day photography competition, which has a lucrative prize pool of USD\$ 30 000. Professional scuba divers and photographers from around the world are being invited to participate by President Ramos-Horta.

The objectives of this initiative include showcasing Timor-Leste's tremendous scuba diving potential and to promote its marine-based tourism to the region and beyond. The contest



will also serve as a mechanism to provide education on the environment, bio diversity and many marine based opportunities that the pristine waters of Timor can offer the people of Timor-Leste.

H.E. Dr. J. Ramos-Horta will act as patron of this event as well as being one of the judges on the contest's panel. President Ramos-Horta said of the event, "It is with great pride and pleasure that I welcome participants to our first underwater photography

contest. Timor-Leste is blessed with some of the richest and most unexplored waters in the world. I hope that this event will draw attention to our great marine biodiversity, our tremendous potential for scuba diving and also the development of diving as a tourism industry here in Timor-Leste. Most importantly this initiative will help us protect our precious seas, reefs and their inhabitants for our future generations."

The President's initiative was launched by the event's director, Mr. Sean Ferguson-Borrell at the Asian Diver Expo in Singapore on Friday the 9th of April.

"ADEX is the largest scuba diving expo in the region" Mr. Ferguson-Borrell said, "this event is a fantastic opportunity for us to launch our website, [www.underwatertimorleste.com](http://www.underwatertimorleste.com) and for Timor-Leste to draw attention to its phenomenal aquatic life – this is why we have used the words; untouched, unexplored and unbelievable to describe the underwater environment of Timor-Leste."

Asian Diver Magazine has also come onboard as the Official Event

Media Partner of the Dive Photo Contest and as a result many scuba diving communities around the world will learn about Timor-Leste and its tremendous marine resources. In conjunction with this initiative the organizers will also produce "The Underwater World of Timor-Leste", a multi media exhibition for the people of Timor-Leste.

The exhibition will feature multi lingual explanations on marine ecology, habitats and the animals that dwell in and around them. With visual aids ranging from locally produced artistic renditions, high resolution panel printing, projections/film areas (with appropriate subtitling) and even small aquariums the exhibition will allow interaction in ways never achieved before in educational platforms here in Timor-Leste. It is planned that school groups will be able to visit the exhibition, which will open on September the 9th of 2010.

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

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# New Products

## Sea & Sea DX-GE5



Sea & Sea have just announced a new camera and housing combination. It is a small and full-featured waterproof compact digital camera set, with 12.2 effective megapixels and 4x optical zoom..

The main features of the DX-GE5 are as follows:

High definition CCD – 1/2.3-inch primary color CCD with 12.20 effective megapixels and 4x optical zoom lens (38–152 mm).

Equipped with underwater photo and video modes perfect for use underwater.

The camera is waterproof at depths up to 5 m. (\*Determined based on General Imaging Company testing methods.)

2.7-inch LCD monitor (with an automatic brightness adjustment function). Approx. 230,000-dot LCD monitor that's easy to see when checking photos while shooting or during playback.



Automatically adjusts the brightness of the LCD screen to match the amount of ambient light in the area.

Equipped with a High Dynamic Range (HDR) function that corrects for blown out highlights and blocked up shadows in scenes with contrasts to give reproduction with a more natural and fluid gradation.

Compatible with highly sensitive ISO 1600 photography.

Removable macro diffuser function. Adjusts light from the internal flash to make it uniform during macro shooting.

When you turn the retractable cable socket, the fiber-optic cable socket slides and is aligned with position of the built-in flash and fixed.

The back cap can be opened and closed while the housing is mounted on the arm stay.

Strong and durable build, with a depth rating of up to 55m / 180ft.

A wide angle lens is available to increase coverage to 28mm (35mm film camera equivalent).

## Wild Waters



Wild Waters is a pictorial and written journal illustrating a handful of vibrant and diverse aquatic ecosystems — Indonesia's Komodo National Park, Lembeh Strait and Bali; Brazil's Bonito region; Mexico's Guadalupe Island; and my home for the last twenty years, South Florida.

On a global scale, these locations cover insignificant, minute territory, but they are unique and contribute exponentially to our planet's richness. These hotspots of biological wealth deserve our immediate attention and care.

Wild Waters showcases celebratory images as well as those depicting our heavy and messy footprints on the natural world. These photos are more relevant than ever because they can inspire us to make things better. As you follow my bubbles in Wild Waters, I hope you enjoy my images as much as I enjoyed making them.

Michael Patrick O'Neill

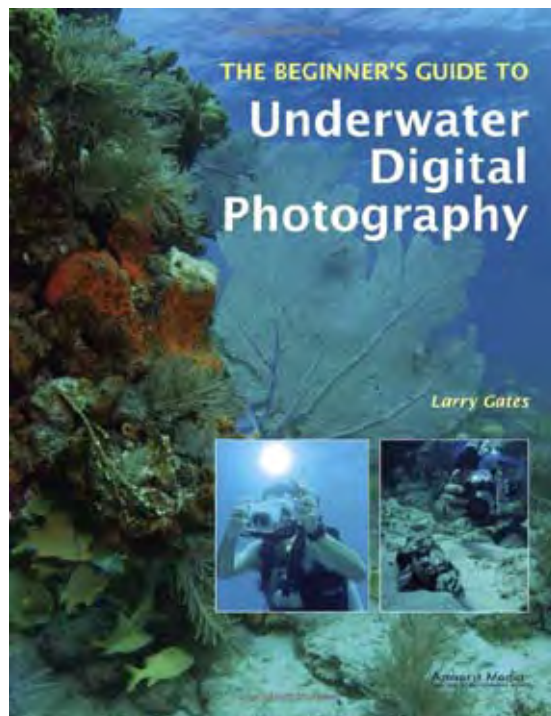
<http://batfishbooks.com>

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

## The Beginner's Guide to Underwater Digital Photography by Larry Gates

Simplifying the seemingly difficult and expensive art of underwater photography, this accessible investigation outlines the four elements of success: focus, exposure, composition, and subject. Beginning with an overview of necessary diving skills, this survey reviews these four categories in detail, depicting how to obtain superior results even without the latest and greatest equipment. Maintenance and first-aid tactics are presented as well, reducing the chance of disappointing malfunctions during a dive.

Also covered is the importance of developing a photography plan beforehand—both for the safety of the divers and the protection of the underwater environment. Concluding with post-shoot techniques for choosing the best frames, cropping photos for printing, and the top methods of presentation, this examination demonstrates how underwater images can be used to share the world of diving while



promoting important conservation efforts.

Larry Gates is an underwater photography instructor. He is a former safety and support diver for Paramount Studios and has provided technical assistance on dives for Vogue magazine. He has been featured in Florida Scuba News, Skin Diver, and Water Line. He lives in Key Largo, Florida.

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

## Nimar Nikon housings



The new Nimar housings for Nikon coolpix S570 and Nikon Coolpix S300 are now available. They are depth rated to 40meters.

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

**Nauticam  
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- Proven Construction Materials.

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



50 years ago underwater photography was something of a dark art practised by a handful of pioneers. Fast forward to today and thankfully things have changed. Now you can capture your adventures in vivid colour with a compact and easy to use outfit that won't cost you a kidney. Where can I get such a wonder? Cameras Underwater of course, we'll even show you how to get the best out of it.

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## New depth rating for Sea & Sea MDX-7D housing and ports



Sea&Sea have announced that after thorough in water testing the MDX-7D housing, along with a number of ports, are now fully depth rated to 100m!

The 100m rating applies to all MDX-7D housings made since the models release in April.

A full list of ports now with a 100m depth rating is listed on their website

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

## UNZ-2449 universal LCD 3x magnifier for underwater housing LCDs.



Designed originally for compact camera housings up to 3inch LCD, this LCD magnifier can also be used with most available DSLR housings for video shooting/Live View.

Great for detailed view and control on sharpness. Can be used up to 4 inches away from diving mask. Secure to housing with supplied universal lanyard.

Size: 84(W)x75(H)x55(D)mm  
Weight:108g. Compatible screen size:65(W)x50(H)mm. Magnifying lens diameter: 46mm. Magnification: 3x on land. Strings:280mm

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## Nauticam NA-550D housing for the Canon T2i

Nauticam is proud to announce the arrival of the NA-550D housing for Canon 550D/T2i.

In keeping with the Nauticam philosophy, the NA-550D housing continues to innovate while building on previous success. Notable examples are the AV+/- switch, new fingertip paddle on the top of the housing to allow easy access to ISO control, a unique rocker lever for easy access to the \* and focus point selector buttons, and a piano key for accessing the quick control button. The playback button is moved out to a lever on the left side of the housing accessed from the handle by the user's thumb. The fingertip ISO paddle is designed with video shooters in mind, allowing quick exposure changes from the handle.

Nauticam's new two stage shutter release lever greatly enhances tactile feel of the half press and full press positions of the shutter release button, allowing precise focus control, and less accidental shutter actuation.

New, easy to use, locking latches eliminate the stainless steel



latches used previously. This new closure method reduces overall size and is easier to operate. A lens release button is offered as standard equipment, allowing lens changes while a zoom gear is attached without opening the housing back.

NA-550D housing is the smallest housing in the Nauticam lineup yet it can still accommodate the same accessories as all other Nauticam housings, allowing use of an extensive line of lenses, ports, locking port extensions, port adapters, lens gears, and viewfinders.

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## Ikelite Panasonic ZS5, ZS7, TS8 & TZ10



Ikelite has produced a housing for the Panasonic ZS5, ZS7, TS8 & TZ10 compact cameras.

As with all Ikelite housings it

is made from polycarbonate with manual controls accessing all camera functions.

An included flash diffuser improves lighting quality but for improved results you can add the AutoFlash AF35 for easy automatic exposure.

The housing's lens port accepts the optional #6430.4 WD-4 Wide Angle Conversion Dome. The WD-4 corrects for refractive magnification to take advantage of the camera's full angle of coverage underwater.

Ikelite housings are available through their worldwide network of dealers.

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



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# Ikelite Housing for Canon SD4000IS, IXUS 300HS & IXY 30S



Dive into underwater photography with this compact and simple to use combination. The

ULTRAc compact housing is high quality, built to last, and backed by Ikelite's long-standing reputation for excellence.

All camera controls are fully functional through the housing and depth rated to 200ft (60m). Easy open latch and drop in camera loading make set-up a breeze.

Size and Weight. 6.2" wide x 4.5" high x 3.8" deep ( including controls and lens port ). 16cm x 11cm x 10cm. 1.25lbs (0.57kg) above water.

Ikelite housings are available through their worldwide network of dealers.

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## Sensational Seas Two

Sensational Seas Two follows the successful 2004 production of Sensational Seas. The anthology presents underwater images as seen through the eyes of 30 divers, from distinguished scientists and seasoned professionals to talented amateurs.

Narrators Stan Waterman and Anne Crawley escort you through a mysterious world brimming with novel, beautiful and unexpected visions. The underwater odyssey begins with an action-packed compilation of fish and critters swimming, scurrying, feeding,

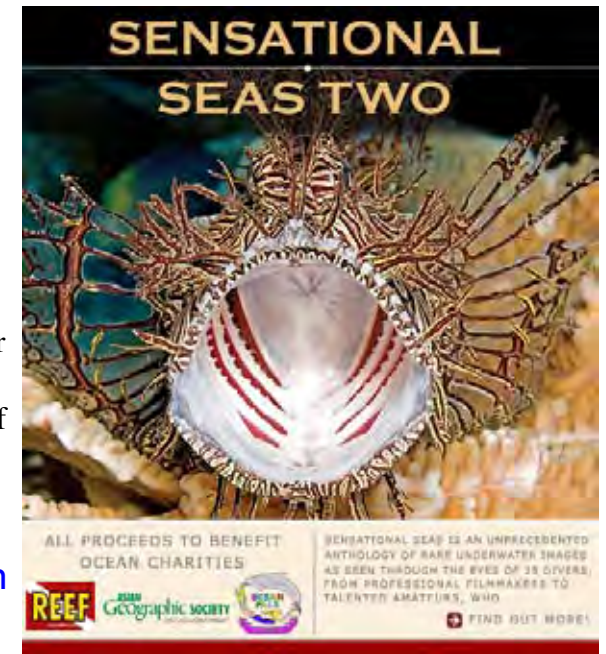
fighting, courting and just being their wonderfully exotic selves to the accompanying beat of Billy Preston. Then off you go on a grand tour of watery realms as far-flung as Antarctica, Australia, the Andaman Sea and Georgia Aquarium. Expect the unexpected, come face-to-face with the gentlest of giants, rolling octopus, spawning frogfish, a snorkeling elephant, and tiny plankton that epitomize the grandeur of nature's artistic flair. Galleries of classic underwater images from some of the world's most

accomplished marine wildlife photographers match frame for frame the audacious imagery from our galaxy of video artists.

Fun-filled, eye-popping entertainment that will make you grab your scuba gear and head for the sea.

All proceeds from the sale of Sensational Seas Two DVD go to ocean charities.

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12.2" 12.2" 12.2"

EXTENDING

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DR 5

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## New BS Kinetics Universal housing for camcorders



Baden based BS Kinetics have developed the new universal underwater casing “Gobi” as a new underwater casing. With camcorders continuously shrinking in size, the rapid model changes and the stringent air traffic rules are cause for new approaches for underwater casings. These restrictions relating to size, weight, universal use, special adaptations to the cameras and customer requests are implemented with this underwater casing.

The carbon casing has a net weight of 2.6 kg and a size of 14x15x31 cm. It will hold cameras up to 17 cm long. The composite material of carbon fibre and epoxy resin, well-known from formula one racing and light aircraft, is as hard as steel while offering the benefits of a synthetic material. It is long-lasting and not

affected by salt water or UV rays.

The camcorder is controlled via a cable or infrared remote control inside the casing. It is offered for camcorders by Sony, Panasonic, Canon and JVC. This flexibility allows all camcorders to be operated. After switching cameras, updating/exchanging the control will set it up for the new camcorder, if necessary.

Recordings can be viewed with a 3.6” TFT colour monitor. It is powered via a rechargeable battery and features a run time of 8 hours. LEDs indicate the battery charge level, reminding the user to recharge in due time. A 3.5” OLED is optionally available. This monitor offers a greater viewing angle and non-reflective images in the sun.

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

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## INON X2 housing for Panasonic GF1

INON INC. has released a lightweight aluminum housing X-2 for the Panasonic Lumix GF1.

The front body panel is manufactured using an ultra precision casting technique while rear body panel is machined from an aluminum block. The total body is designed to enhance advantages of both manufacturing procedure to balance size, weight underwater and strength

The body shape and design allows each right hand fingers to come to a neutral position to take a firm grip and a thumb hook on the back panel assists to hold the housing firmly without effort.

Almost every function of the LUMIX GF1 is operable from housing controls. You can control the Cursor buttons/Rear dial without changing your right hand position. The built-in flash can be completely closed with a control lever.

The back panel has large LCD monitor window not only to see the LCD monitor itself but also provides visual contact with camera's control buttons to enhance intuitive operation underwater.

The camera is precisely fixed in the housing via the tripod-screw and both shoulder strap eyelets.



Since neither the front nor side of the camera comes into contact with the housing, water-pressure will never cause any unexpected operation of the camera.

Spacious inner construction allows you to put fingers between the camera and the housing to pull out the camera easily with one hand, and further helps to gain buoyancy to have less underwater weight.

Four Optical D Connectors are equipped as standard to benefit simple yet reliable "S-TTL" Auto with a maximum of four external strobes supporting accurate exposure simply

by pressing the shutter release button even for high power multi-lighting circumstances allowing you to focus on artistic intention or composition.

Compatible lens ports support five different lenses; 45mm/F2.8 Macro, 20mm/F1.7 Pancake, 14-45mm/F3.5-F5.6 Zoom, 7-14mm/F4 Zoom and 8mm/F3.5 Fisheye. All lens ports use optical lenses with multi coating to take full advantage of optical performance of LUMIX/LEICA lenses.

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

## UnderWater Camera Stuff Housing Sentry

UnderWater Camera Stuff announced the release of the Housing Sentry. The Housing Sentry continuously monitors the status of an underwater camera housing alerting the photographer/videographer if there is a seal problem that could lead to a flood. The Housing Sentry delivers peace of mind to the underwater photographer/videographer.

The Housing Sentry allows a vacuum to be drawn from an underwater housing creating a stronger seal for o-rings and housing parts such as lens ports. It also continuously monitors the status of the vacuum and communicates



“everything is okay” (green flashing LED) or “there is a problem” (red flashing LED). The Housing Sentry can be installed in any housing having sufficient space regardless of the manufacturer or model.

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



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## Ikelite Housing for Flip SlideHD Camcorder



Dive into underwater videography with this incredibly compact and simple to use combination. The Compact Video housing is high quality, built to last, and backed by Ikelite's long-standing reputation for excellence. A full line of accessories allows you to get really creative with your underwater video.

All outer controls are accessible through the housing and depth rated to 200ft (60m). Slide strip and menu functions on the inner slide screen are not accessible while in the housing. Easy open latch and drop in camera loading make set-up a breeze.

Housing includes a 1cc tube of

silicone lubricant, vinyl lanyard, port cover and removable UR/Pro color correcting filter for tropical blue water settings.

Size and Weight.5.8" wide x 4.3" high x 3.1" deep ( including controls and lens port ).14cm x 11cm x 7.6cm. Less than 11lb (0.45kg) above water. Slightly positive underwater.

The Ikelite Housing for Flip SlideHD Camcorders costs \$260 (camera not included) and is available from Ikelite dealers worldwide.

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

## Underwater New South Wales DVD

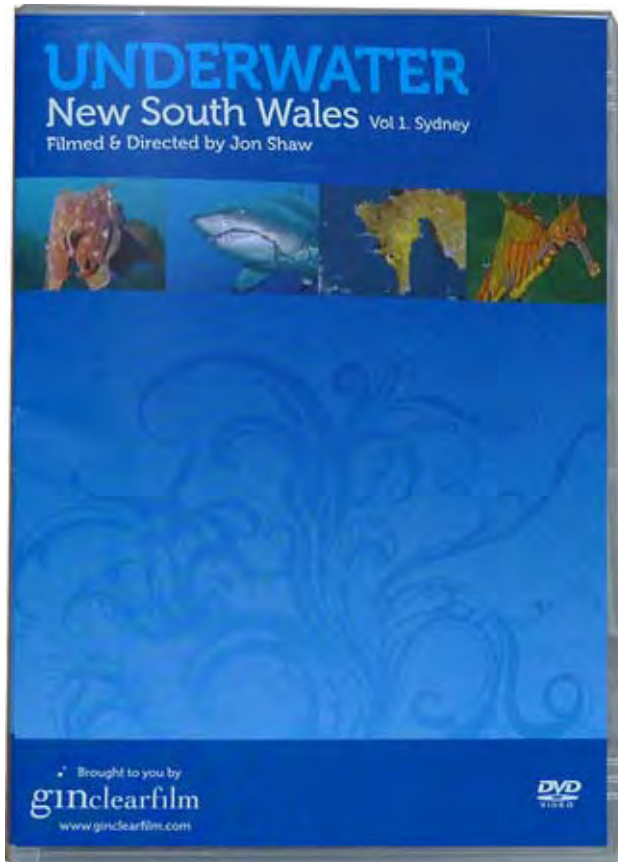
Filmed & Directed by John Shaw

Underwater New South Wales is a collection of footage shot over a three year period with over 500 dives on the popular sites around Sydney. There is over 60 minutes of material and it is bursting with marine subjects from small and quirky to the large and endangered.

It is a testament to the amazing marine life that inhabits the waters adjacent to one of the world's major cities and it fills me with jealousy of those divers who live in the area and have such excellent photographic subjects on their doorstep.

Some of the footage was used in the Sensational Seas DVDs which have developed into a showcase of top class footage shot by the world's leading film makers.

Underwater NSW: Sydney was the winner of the 2009 Wetpixel Sensational Seas contest and is available for \$29.99 + P&P (Multiregion PAL only) online at Underwater Australasia.com and at



all good dive stores in Sydney and the NSW Central Coast or direct from Jon Shaw himself at GinClearFilm.

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

**Peter Rowlands**

## Gates HMR10/HCK10 POV Housings



New to the Gates 'bulletproof' underwater imaging lineup, the HMR10 and HCK10 POV (Point of View) housings are perfect for those distinct applications where distance viewing and/or small camera size are important. Like getting up close and personal with a Great White. Inspecting the next Cenote passage? Or how about capturing Surf Crabs in 6in / 15cm of water? The HMR10/HCK10 housings let you shoot remarkable HD image quality, from a distance of up to 60ft / 20m.

Compatible cameras: Panasonic AG-HMR10 Recorder / HCK10 Camera

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<p><b>For Sale</b></p>  <p>Original FE (Fisheye) Subal Glass Port Fits MK3 Subal Housings It is in In Mint + condition.</p> <p>Not been in use for some years so make me an Offer.</p> <p>Contact Paul Ives <a href="mailto:paul@paulives-photographer.com">paul@paulives-photographer.com</a> 07867 787286</p> <p>Ref c93</p>	<p><b>For Sale</b></p>  <p><b>Sony HDR-HC9Ecamcorder and Ikelite Video Housing 6039.07</b> with External UR/Pro colour filter, Internal lens shield, silicone lubricant, a Hardigg Storm case IM2400 in black with interior foam. All come with original packaging etc. The equipment is just over 12 months old (May 2009) and has been used on only about 10 dives. For full specifications &amp; more photos please contact me. I'm asking £1850 (Original price was £2425). Carriage extra.</p> <p>Judith <a href="mailto:Flitwick55@aol.com">Flitwick55@aol.com</a></p> <p>Ref c94</p>	<p><b>For Sale</b></p>  <p>Underwater Photographic Package 1</p> <p>Nikon D100 camera Sea and Sea D100x housing Sea and Sea domed port. Sea and Sea Strobe Strobe Sync cord Nikon 18-55mm lens Gears for the 18-55mm lens Camera Battery, Compact Flash Card and Instruction Manual All equipment is in excellent condition</p> <p>Package price £1300</p> <p>Contact Dave on 07791 298554</p> <p>Re c91</p>	<p><b>For Sale</b></p>  <p>Underwater Camera Package 2</p> <p>Nikon D70 camera Sea and Sea Housing Sea and Sea Flat Port Sea and Sea Strobe Sea and Sea Sync cord Nikon 60mm lens Camera battery, SD card and manual All equipment is in excellent condition, not more than 40 dives total use.</p> <p>Package price £1250</p> <p>Contact Dave on 07791 298554</p> <p>Ref C90</p>
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## Classified Lite

A Classified Lite includes a photo up to 240 pixels wide (send any size image and we'll resize it for you). You can have as many words as you like but please bear in mind the more words there are, the smaller they will be! As a guideline 50 words is about the right combo of words and size.

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A Classified Extra will run until you sell the equipment!

**This costs just £10** and includes your Classified Lite

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

# Olympus E-PL1 & PT-EP01 housing

by Phil Rudin

Olympus officially launched its first Micro Four Thirds camera the E-P1 in June of 2009 after a clever advertising campaign linking it to the very popular PEN film cameras of the 1960s and 70s. Fast forward to February 2010 and the official announcement of the Olympus E-PL1, a simplified and less expensive addition to its Micro Four Thirds camera line. The E-PL1 is the third camera in the PEN line and at a consumer friendly MSRP of \$599 with the Olympus M. Zuiko Digital ED 14-42 mm “kit” lens will appeal to compact camera shooters wanting to move up. Olympus also announced the new PT-EP01 underwater housing for the E-PL1 camera at an MSRP of \$599. Olympus has a great track record for introducing appropriate cameras with underwater housing and then getting the housings to dealers soon after the launch of the new cameras. This allows the buyer time to learn the cameras functions and to be assured that a housing will be arriving soon after the camera.

## Olympus E-PL1

Olympus developed the first Four Thirds DSLR cameras and the

Micro Four Thirds cameras share the same sensor (e.g. 17.3 x 13 mm) and image quality. The E-PL1 is an electronic viewfinder/ interchangeable lens camera body sometimes referred to as EVIL or Micro Four Thirds. This mirror-less, live-view camera has established itself as a new breed gaining credibility with both consumer compact and SLR owners. The sensor size, interchangeable lenses and compactness of these mirrorless cameras is what set them apart from the mainstream. Consumer compact cameras on average have sensor sizes nearly five times smaller than the Micro Four Thirds sensors and fixed lenses most of which do not exceed F/8 due to the tinny size of the sensor. The Micro Four Thirds cameras have image quality on par with many of the SLR cameras with the APS size sensor.

They are much more compact because they are constructed without the large mirror box and optical viewfinder and far less expensive. Some of the main features of the E-PL1 body include a 12.3 megapixel Micro Four Thirds sensor, in-body image stabilization, “live guide” interface, built-in flash, 720p HD



video with direct record button, 100 to 3200 ISO, six art filters for creative effects and a hot shoe for add-on accessories like the outstanding VF-2 electronic viewfinder, external strobes, and external microphone adapters. Because the Micro Four Thirds platform is an open standard lenses from other manufactures can be used with excellent results. Panasonic is the other leader in the Micro Four Thirds arena and has released several lenses along with Olympus which are ideal for underwater photography.

Before starting a review of any

new camera I like to field test the system by capturing at least 5000 images so that I have a chance to get a feel for the controls, have a fair sampling of the lens/dome choices and have a chance to form an opinion on the quality of the images produced and the robustness of the system. While the E-PL1 has a variety of auto modes I spent most of my time shooting in manual because it gives me the best starting point for comparison to other camera systems I have tested in manual mode.

As a starting point I used the

following basic settings on the E-PL1 for my tests, ISO-200, auto white balance, adobe raw files, Image Stabilization-1, ESP metering, single frame advance, single and continuous AF, RC mode off (this would be turned on when using the Olympus UFLstrokes), images were exposed shooting in both TTL and manual. I have found the optional VF-2 electronic viewfinder to be an outstanding option above water but it is of little use in the PT-EP01 housing because your eye is just too far back from the viewfinder while wearing a mask. The VF-2 would work very well if an accessory like the Inon 45 degree accessory viewfinder could be added to the PT-EP01 housing.

The E-PL1 produced images with excellent resolution and image detail even shooting very close with the kit lens set at 42 mm while using an add-on Inon UCL-165 close-up lens. I am sure this lens and sensor would be equally up to the challenge of using the Reefnet SubSee +5 and +10 magnifiers as well. If you are not into shooting raw files, and many are not, the EPL-1 has a stellar JPEG engine along with dependable metering and white balance. Auto focus performance is on par with all the Micro Four

Thirds cameras, well ahead of the consumer compact cameras and a bit slow by mid-range DSLR standards.

The wider the angle of view of the lenses I tested the faster the auto focus seemed to be. The Panasonic M7-14 and Olympus M9-18 zooms were on par with many entry level DSLR auto focus speeds. The Olympus 14-42 mm kit lens is a bit slower than its more expensive siblings but well ahead of consumer compact camera shutter lag ranges and quite good for its cost.

Announced along with the EPL-1 camera was the PT-EP01 Underwater Housing with a “fixed”



port for use with the M.14-42 mm kit zoom and the Olympus M. Zuiko Digital ED 9 to 19 wide angle zoom.

### The PT-EP01 housing

The PT-EP01 is a clam-shell style housing (e.g. front section and door held together by a hinge) made from high-grade polycarbonate. It is smaller in design but very similar to the well regarded Olympus PT-E05 and PT-E06 housings for the E-510/520 and E-620 DSLRs. The rear door has a single O-ring which seals the housing.

Like all of the current Olympus housings the PT-EP01 is rated to a depth of 130 feet (40 meters) the maximum recommended depth for recreational sport divers. I have pushed that limit to 150 feet (46 meters) without issues to structural integrity or loss of push controls. The housing's rear door has twelve well labeled push buttons for all twelve push button controls on the rear of the E-PL1 camera, a push button to activate the optional VF-2 electronic viewfinder and a rotating dial to control the mode wheel on the top of the camera. The top of the



housing has the on/off push bottom and the shutter release lever which is pressed down from the top rather than being pulled like a trigger. I found this a little awkward at first when using a try with grips.

Once you hold the right side of the housing with your right hand and use the grip as a wrist support tripping the shutter becomes much more comfortable. On the left front of the housing viewed from the rear is the-focus/zoom dial which is 30 mm in diameter. This dial is used to zoom lenses and could be used as a focus dial as well for fixed focal length-lenses like macros. Using a tray with a grip on the left side my index finger was in perfect alignment with the zoom dial and rotating it with light weight dive gloves is a breeze. With my dry suit gloves the zoom control will be more awkward to turn.

Next to the zoom dial are two optical ports for use-with fiber optic strobe cords. This housing has no sync ports for wired-strobe connectors and supports only strobes with fiber optic capability. For my testing I used two Inon Z-240 strobes and the new Athena ARF-01 ringflash which uses a Sea &

Sea YS-01 DS-TTL strobe head as its power-source. The housing ships with two fiber optic cord holders inserted into the-optical ports. These rubber holders can be used with the fiber cords that have a bare end or be removed so that the Sea & Sea type cords can be used. Note that the two rubber plugs need to be cut on the end so that the-fiber optic cord can be pushed through the center of the plugs. The external strobes are triggered by the camera's pop-up flash using the exposed fiber-optic cords as the trigger. Missing from the PT-EP01 housing is a way to pop up the camera's on board flash once the housing is closed, this was not-a problem with past Olympus DSLR camera/housing combinations as it-could be done from the menu. The E-PL1 however has no way to deploy the flash once the housing is closed and I am sure I will curse the day I get to ninety feet and find I have forgotten to deploy the pop-up flash and have no way to fire my external strobes.

The bottom of the housing has three standard mounting points for grip/tray attachment and other threaded accessories. The top of the housing has a metal cold shoe to attach modeling lights, assorted video lights, strobe arms and an assortment of other accessories. When the PT-EP01 housing was introduced by Olympus it was advertised as a "fixed" port housing for use with the Olympus M. 14-42 mm and M. 9-18 mm zoom lenses. While these two lenses cover a wide range of possibilities and would appeal to any newcomers to underwater photography, the Olympus flat port will limit the wide end of the M. 9-18 mm zoom and provide less than stellar results. This is an excellent entry level system at a very appealing cost. For under \$1200.00 MSRP you get a high quality camera, a very useful kit lens and a complete underwater housing, less the \$45.00 zoom gear for the kit lens and the \$45.00



shading ring. By the time this article is published I am sure the number will be somewhat south of the original MSRP price.

### Lenses and ports

When you open the PT-EP01 housing you will see a small Phillip's head screw below the shutter release device. Remove this screw and a small metal port retaining clip can also be removed. Turn the dome port clockwise and it can in fact be removed from the housing just like any other bayonet mounted dome PEN port. Once the port is removed you will see that it has two o-rings to seal it in place and a very robust mounting system. As with past Olympus DSLR housings an after market of accessory products is rapidly evolving. The most noteworthy is the Zen Pen Dome Port with a respectable MSRP of \$499.00. This extremely well designed bayonet mount port incorporates the twin o-ring seals and is constructed from high grade aluminum with a 100 mm dual coated optical glass dome. When mounted on the PT-EP01 housing it makes a very small and light package no bigger than



*Zen Underwater Pen Dome*

the original Olympus flat port. The port works very well with both the wide angle Olympus M. 9-18 mm and the M.14-42 mm zooms.

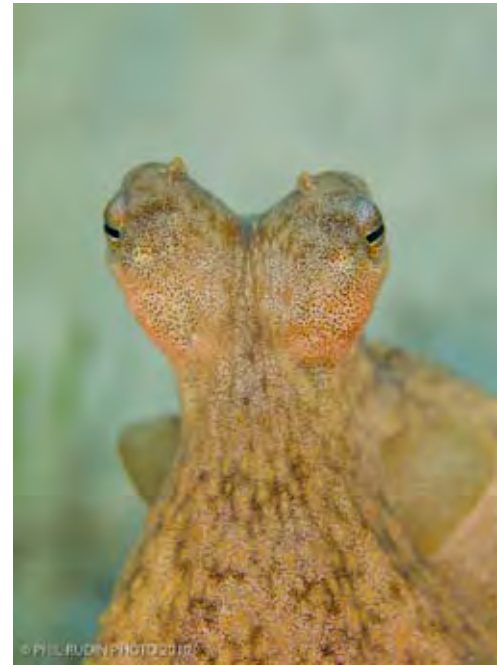
At 9 mm images are sharp into the corners at F/5.6 and above with no loss of color fidelity while retaining the lenses full 100 degree angle of view which is noticeably reduced when using the flat port. This port is a must have accessory if your major interest is wide angle. For those who already own the Olympus or Athena 170 mm dome port for the Olympus DSLR housings Athena has just released the AD/EP01 port adapter which allows all of the Olympus DSLR style threaded optical glass ports to be mounted to the PT-EP01 housing. At present this port adapter and Olympus/Athena 170 mm port combination can be used with the Olympus M. Zuiko Digital ED 9-18 mm zoom and the Panasonic Lumix G vario 7-14 mm zoom. I have



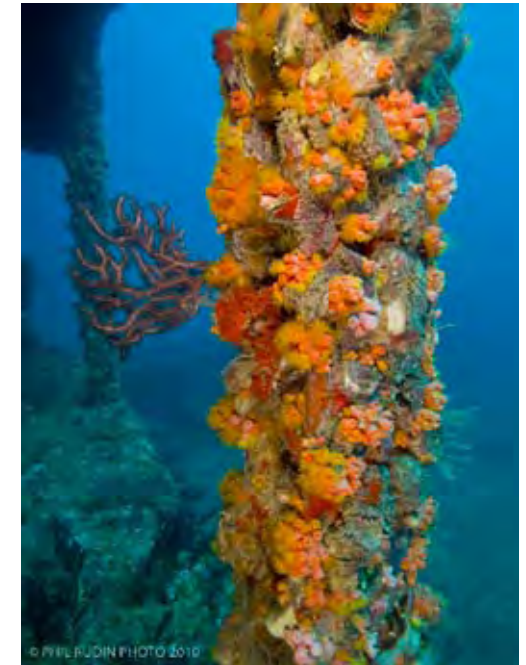
*Loggerhead Turtle, Olympus M.9-18 zoom lens at 9 mm, ZEN PEN U/W dome port.*



*Seaweed Blenny, Olympus M.14-42 mm zoom lens at 42 mm and Inon UCL-165 M67*



*Common Octopus, Panasonic 45 mm macro lens.*



*Orange Cup Coral, M/V Castor, Olympus M.9-18 mm zoom lens at 9 mm, ZEN PEN U/W dome port.*

not yet tested the Panasonic Lumix 8 mm fisheye with this port system.

The Athena OPF-TMP35-PTE port for the Olympus DSLR 35 mm macro lens can also mounted to the port adapter for use with the Olympus M.Zuiko Digital ED 14-42 mm zoom and the Leica DG macro-Elmarit 45 mm macro lens. The 45 macro lens has internal focus and the front lens element sits well inside this port reducing the distance between the front of the port and the subject by about two inches. This may not seem like much until you try to use the lens at lifesize (1:1) and find your subject pressed against the port glass or quite near it. This article mainly focus on still photography but I did do some video clips with the M.14-42, M. 9-18 and Pany 7-14 zooms. With the kit lens you can hear a little noise in the

sound track when the lens re-focuses on a moving subject with the more expensive zooms no focus noise was detected. I shot A/V light in 8 to 12 feet (2.5 to 3.5 meters) of salt water. I am not a capable videographer so I will leave further comments on the E-PL1s video prowess to other more knowledgable journalists.

### My thoughts

Do not assume that the kit lens can't take quality photos. This lens has a decent range for shooting anything from divers to close-ups.

Add a +5 to +10 diopter and you can approach life-size (1:1) macro images. With the Olympus port and kit lens the housing is buoyant by a few ounces in salt water. This is not a bad thing at all, I found that by the time I added a tray/ grips and some lighting it was one of the most well balanced systems I had ever used.

An external focusing light can be used to help speed auto focus when diving in low light areas, I shot 99% of my images without a light but it sure can't hurt to have one. I would have liked to see a higher

shutter sync of at least 1/250th of a second rather than 1/160th in future cameras. I would also like to see a firmware update which allows vertical (portrait) images to be rotated without having to do it in the computer in post processing.

In conclusion the out of the box Olympus E-PL1, M.14-42 zoom with PT-EP01 housing system fills the void very nicely between the limitations of the fixed lens consumer compact camera line and much more expensive DSLR systems. Not only will this system appeal to the needs of many



*Caribbean Reef Squid, Panasonic 45 mm macro lens.*

divers on a budget or wishing to move up from compacts, it is also a very expandable system with a growing list of lenses and ports well suited to U/W photography. With its light weight, reduced size and excellent image quality it will also fit the needs of many traveling photographer looking for a lighter travel system. I know my next trip will include this system.

**Phil Rudin**

*Phil Rudin is Senior Photographer for Dive Chronicles Magazine and a freelance writer/photographer. He also hosts underwater photography-workshops at several consumer dive shows around the country.*

*On September 25, 2010 Phil will teach a three hour Olympus U/W-Photo Equipment workshop and a three hour Macro Photography workshop at the Colorado Dive Show.*

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# The Sigma 17-70mm

A lens for the indecisive?

By Dr Alex Tattersall

Fellow SLR users, have you ever noticed the gleeful look in the eyes of the compact user on those two occasions in particular?

1. Airport checkin. How smugly they breeze through airport check-in and customs without the need for crippling excess baggage charges. Bypassing the adrenalin pumping Russian roulette of praying that your 20kg hand luggage Pelicase is not going to be weighed by the over-zealous check-in assistant who is having a bad day. Never having to sport the 'haute couture' photographer's jacket stuffed to the top with batteries, lenses, strobes, and all manner of 'essential' accessories.

2. The pre-dive dilemma. Every time they hear that familiar mantra of us poor SLR underwater photographers before every dive: "macro or wide angle?, macro or wide angle?, macro or wide angle".

Perhaps we have an answer to occasion number two.

We all know that lens choice will determine both photographer mindset and photographic opportunities for the next hour, even potentially

condemning us all to a series of missed opportunities for making an incorrect choice. Have we, SLR users, not all been party to that fantastic macro behaviour whilst equipped with a super wide-angle fisheye lens or that monumental large animal interaction whilst sporting a super macro setup?

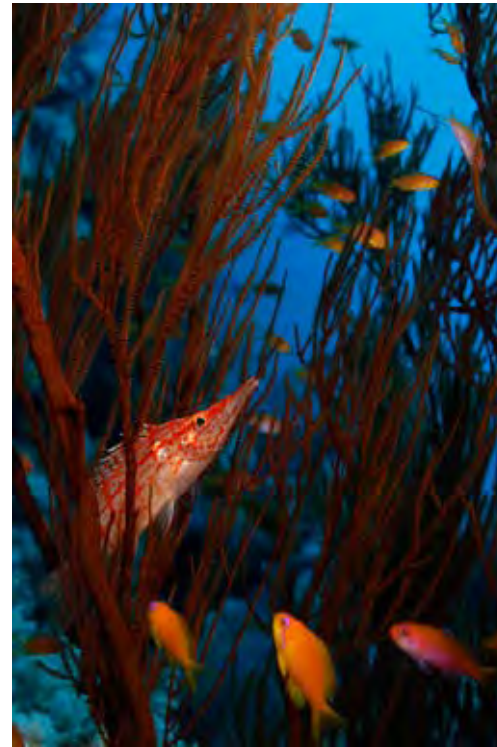
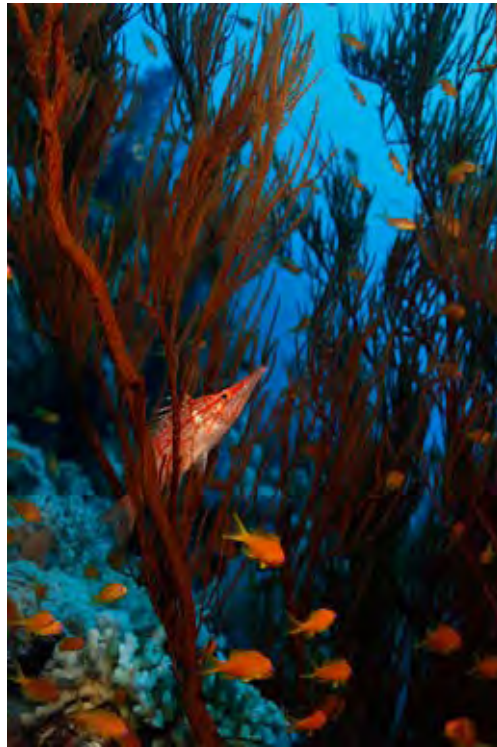
I have recently returned from a Dr Alex Mustard photographic workshop in the Red Sea which gave me the opportunity to test a number of lens setups with the Canon 7D in its Nauticam housing. One previously largely overlooked lens in my collection made a steep climb in popularity for use in those wonderful, clear-blue, Red Sea water conditions. We spent several days at Shark and Yolanda reefs, Ras Mohammed, on the very tip of the Sinai Peninsula, as June is the time for huge aggregations of schooling fish. At the same time however, the sites boast such macro favourites as the long-nosed hawkfish, pyjama nudibranchs and the wonderful leopard blenny. Enter the Sigma 17-70mm whose versatility earned it pride of place on my camera for the last six dives of the week.



*Canon 7D, Nauticam NA-7D, 8.5" Nauticam dome, extension 50, 2x INON Z240  
Sigma 17-70mm@ 21mm F9 1/125 ISO 200*

The Sigma 17-70 comes in three different versions, the early and now discontinued 17-70mm F2.8-4.5 DC Macro, a later HSM (Hyper Sonic Motor meaning quicker focusing) version of the same lens (only available in a Nikon fit and on the verge of being discontinued), and the recently released 17-70mm F2.8-4 DC Macro OS HSM which features image stabilisation on top of the high speed focusing of the previous model. The diameter of the lens has become progressively larger with each new





*22mm*

*30mm*

*44mm*

*62mm*

*Note that all photos are uncropped. Thanks to Christian who spotted this beautiful long-nosed hawkfish at 20 meters on Shark reef. Canon 7D, Nauticam NA-7D, 8.5" Nauticam dome, extension 50, 2x INON Z240 Sigma 17-70mm F7.1 1/50 ISO 200*

version and this should be borne in mind when purchasing corresponding zoom gears. It should also be noted that these lenses extend significantly on zooming, the older style (non-OS) versions requiring a 50mm extension when coupled with a 8.5" Fisheye dome on the Nauticam. The later OS version extends further and requires a 60mm extension on my setup. Full specification details for those

interested can be found at the Sigma imaging website.

Although this is entitled a 'macro' lens, I found it impractical to use with a flat port due to the length of extension when moving through the zoom range. It is therefore best used behind a large dome port, from my experience. Maximum magnification is in the region of 1:2.5 so its application is not suited to very small

subjects.

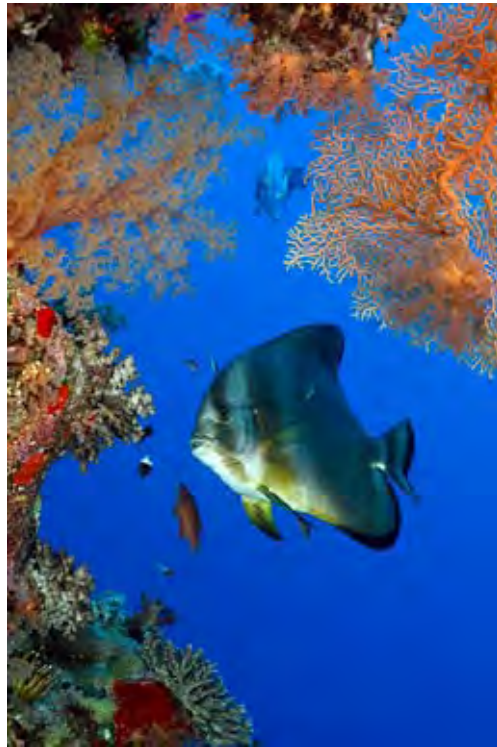
I was using the original non-OS and non-HSM lens on the recent trip and I was very pleased with the results. Since the lens focuses very closely, I did not need to use a dioptre throughout the zoom range and the corners of the shots were always very sharp, even at relatively wide apertures. The lens has a relatively close working distance of some 4cm

which has the obvious advantage of not requiring an additional dioptre. A disadvantage though with this close working distance is remembering not to get too close, as I discovered to my dismay when I saw the deep grooves in my shiny new dome port.

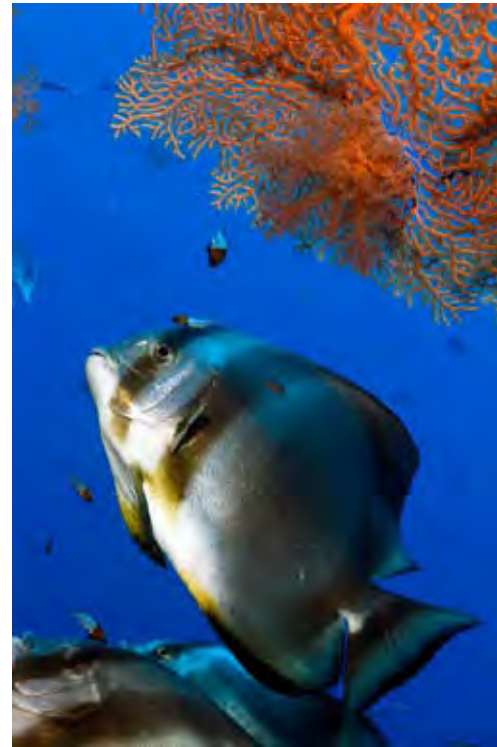
It is however the versatility of the lens which makes it such a winner in my eyes. One caveat before we look at some images is that this article



**17mm**



**44mm**



**62mm**



**Anemone and nemos**  
**Canon 7D, Nauticam NA-7D, 8.5"**  
**Nauticam dome, extension 50, 2x**  
**INON Z240 Sigma 17-70mm@ 50mm**  
**F9 1/60 ISO 200**

**At about 15 meters on Shark reef was a cleaning station and individuals and groups of batfish were leaving and rejoining the huge school aggregated in the blue. The Sigma 17-70 allowed me to take shots of both small groups and individuals. Canon 7D, Nauticam NA-7D, 8.5" Nauticam dome, extension 50, 2x INON Z240 Sigma 17-70mm ISO 200**

has been conceived as a result of the images and the experience of using the lens, not vice versa. Consequently, I have to admit that this was therefore not the most systematic testing of the lens but I hope my experience is helpful. I am also not the first person to suggest the Sigma 17-70mm as a good mid-range lens for UW photographer. I seem to remember,

perhaps three years ago, seeing photos taken by Ross Gudgeon that compelled me into investing in this relatively inexpensive addition to my armoury.

I think these shots demonstrate well the versatility of the lens and the high quality and stunning colours of the resulting photos. It was a pleasure to be able to have the both macro and

the wide-angle opportunities at my fingertips.

Perhaps then, fellow SLR user, we have an answer to combat the smugness of the compact user, with their dastardly wet lenses and their infernal lens mounts. Of course, that is only once we have successfully run the heart-thumping gauntlet of the airline check-in, foiled the highly-

trained, crack-command airport security team and nonchalantly, oh so very nonchalantly, lifted the hernia-inducing 20kg Pelicase into the suddenly rather flimsy looking overhead locker. Who, but us, could ever understand how finally coming to sit down in the comfort (!) of a cramped charter airplane seat could ever feel so sweet?

PS I am now stocking this lens at a very favourable price for those of you who are UK based. I tried to resist a commercial plug, but could I? No.

**Dr Alex Tattersall**  
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D90  
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# Nauticam White Balance Port

By Peter Rowlands

When I first saw the Nauticam White Balance Port I thought that it was a great idea but that it solved a problem that didn't exist but that was a couple of years ago when, in a strange sort of way, underwater photography was quite different.

Since then we have seen SLR cameras become capable of shooting HD video footage as well as stills and that has made this white balancing port take on a new lease of life.

When shooting stills, each image is a standalone product but with video it is the opposite. When compiling an edited film, each clip must not only work in itself but it must also work with the clips before and after it in terms of storytelling and colour matching and this is where the Nauticam White Balance Port really comes into its own.

Operating the White Balance Port is as simple as turning a knob and the iris

shaped translucent petals close to cover the lens. Once a white balance reading has been taken, the same knob is rotated backwards to clear the lens. In addition there is some clever internal machinery that not only opens and closes the petals but it also pushes the whole mechanism forward to go in front of the lens and then retract so that it doesn't give cut off with ultra wideangle lenses. The whole operation takes literally seconds and becomes second nature after a while. The translucent mask that covers the lens creates a white 'card' and produces images that are much more consistently balanced for light recording.

I field-tested the port in the Red Sea recently and I am grateful to Nauticam UK's Alex Tattersall for making it available. I was shooting a Canon 7D in a Nauticam housing (again thanks to Alex) with a Tokina 10-17mm lens used at the 10 end all the time. All footage



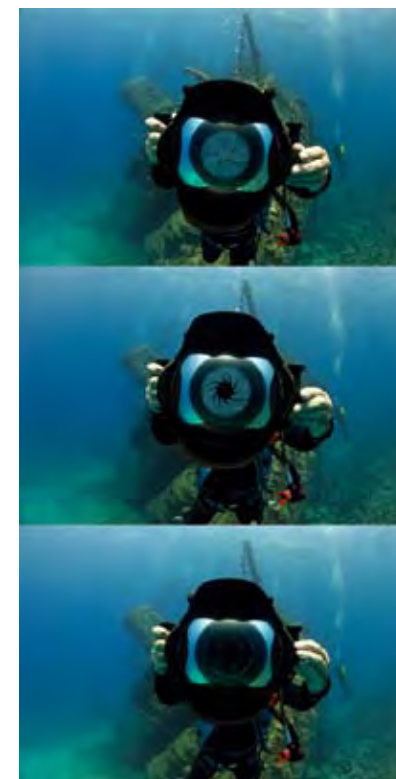
was shot by available light with an Original Magic Filter. The port made my footage much more consistent colour-wise and eliminated the need to colour match on post production. This alone saves an inordinate amount of time, and time, as they say, is money so this port pays for itself in its time saving capabilities.

The Nauticam White Balance Port is an acrylic 8.5" dome on an aluminium body with an ABS shade and it

retails for around \$1300. This is considerably more than the standard 8.5" dome port but in terms of its white balancing capability it is priceless.

You can see my finished footage taken on the wreck of the Giannis D by following the YouTube link below and all of the footage is totally as shot with no colour matching needed.

This port is a real time saver and will improve the



*The port in use.*

*Photo by Alex Mustard*

consistency of your video footage and since your SLR also takes stills, it will help them too!.

**Peter Rowlands**  
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[www.nauticamuk.com](http://www.nauticamuk.com)

[www.youtube.com/watch?v=ZEHRekxt6ag](http://www.youtube.com/watch?v=ZEHRekxt6ag)

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# SeaLife DC1200

By Peter Rowlands

I think it's fair to say that SeaLife have, in the past, produced cameras to a price to cater for the entry level photographer and as such they have introduced thousands of divers to a new hobby. For most of them their first camera will be all they need but for a significant number their photographic requirements will expand as they get keener and they will move on.

With the SeaLife DC1200 however you have an inexpensive basic camera which has some system accessories including external strobe and wide angle lens which can be added later to make it much more versatile and as such it could be all the camera you ever need.

In terms of specification the DC1200 is a 12 megapixel stills and 640x480 video camera. It has a 34-170mm lens (in 35mm terms) which can focus, in wide macro mode, from 4 inches to infinity and, in tele macro mode, from 2 feet to infinity. It takes SD and SDHC memory cards up to 16gig and comes with a long life rechargeable battery.

It is a point and shoot camera with several scene options so it is very simple to use yet it has more

white balance settings than any other camera I know. In addition to the usual Auto and Manual white balance settings there are presets for both blue and green water for both less than 25 feet and below 25 feet. This is a real first for any underwater camera. But there's more. There are even 2 settings for allowing double exposures. The first is picture on picture (whole frame each time) or left frame and then right frame. This is a very effective technique to create images with a new and imaginative perspective. And then there's the 'Spy' mode which allows timelapse shots a frame every 10 secs, or 30 secs, or 1, 5, 30 or 60 minutes.

The SeaLife DC1200 is basically a land camera in an underwater housing so it can be taken out and used on land in the usual way. SeaLife have obviously had the camera specifically made for them as, in addition to the large range of white balance settings, it also has some operating capabilities unlike other cameras which only become apparent once it is in the housing.

At first glance the housing has fewer controls than the camera so I was immediately suspicious that



some of the functions would not be available underwater but the camera has some dual function capabilities which make it work perfectly well with just 5 lovely paddle lever style controls. On the camera there is the usual dial with 'up/down/left/right' buttons but the housing only controls the 'down' and 'right' action however, depending on the mode you are in, the zoom lever controls either up and down or left and right. Very clever indeed. The result is, as far as I can ascertain, that you can control all of the camera functions underwater with the exception of exposure

compensation.

The UK price of £399.99 includes a 2gig card from Cameras Underwater and there is a Elite package price of £749.99 which includes the DC1200 camera, SL961 strobe set, flash link, wide angle lens and lens dock + soft, lightweight travel case.

**Peter Rowlands**  
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# Leak Insure

By Alex Mustard

If there is one thing all underwater photographers fear, it's the f-word. I have always thought flood is a particularly apt choice of noun. We could have used leak, seep or soak, but flood implies a catastrophe on a biblical scale. Quite correctly.

Floods are inevitable for those of us who choose to take cameras into the ocean. The old saying goes: "Nikonos photographers can be divided into those who have flooded their camera and those that will!" And as cameras have become ever more reliant on electronics, so the consequences have become more dire. Every Nikonos III owner will delight in telling you, that if you flood a completely mechanical camera it can be washed out in fresh water and used again. I always feel I've missed out by not actually flooding my Nik 3. Anyway, with modern cameras, even minor floods can trigger gremlins.

Scared though we are to mention the f-word, floods are not common. My cameras spend a fair bit of time in the water, and I have never lost an SLR (film or digital) to the sea, despite considerable hours of photography. But I probably will one day, no doubt my first morning with

the new Nikon D4x!

Experience has shown me that almost all floods, and I've seen plenty, result from operator error. The best medicine is preventative. I have never had flood insurance on any camera I have owned, but I always make sure my housing is correctly prepared for a dive (perhaps as a consequence?).

Floods generally fall into two categories. The worst are gushing floods, where water pours into the housing instantly quenching electronic life. These floods are almost always caused by user error: o-rings not seated properly and pinched, ports or housing backs not attached properly, or systems getting a jolt or rotation during handling. The danger moment is the first seconds of the dive. I always spend this critical period with my housing port down, me staring up into the port for droplets. The other time for catastrophic floods is in rinse tanks after dives. Whether it is the pressure release from the dive, or perhaps something being knocked during handling or when another camera is dumped in on top, I am not sure. But I have still seen more rinse tank floods than ocean ones. As a consequence you will never find my



***Leak Insure sachets, designed to soak up minor housing floods, are available in different sizes for different types of underwater housing.***

housing in a rinse tank unattended by me.

The more common type of flood is the slow leak. This is typically caused by a hair, grit or cut on an o-ring, which tend to cause a seepage of water. This is the type of flood that the product Leak Insure is designed to combat. You place one inside your housing and should water get in, the sachet will soak up the harmful brine and buying you more time to get the camera to the surface. Ah yes, you might have forgotten this was a review! I should apologise for the oversized introduction, but testing

a product that is designed to protect your camera in case of a leak is not straightforward. I wasn't prepared to open my housing underwater to see if it worked, I apologise if you're disappointed!

So does Leak Insure have any competition? The classic absorbent solution favoured by underwater photographers of all sexes, are female sanitary products. There are even different shapes available for different shaped housings. They are inexpensive and widely available, the main downside is when one falls out when you open your housing and rolls

across the deck of the dive boat!

Tampons are Leak Insure's main competition. So I compared a sachet of Leak Insure with a sanitary product I found in our bathroom cupboard. The Leak Insure was able to absorb about 30-50% more water, but interestingly the tampon expanded much more. And no, I didn't photograph the test. In short, the Leak Insure sachets expand less (to about 2-3 times their original size) and absorb more than a similar-sized tampon. This is particularly important if squeezing them inside a small compact housing.

And that, I thought, was that. I never expected to use Leak Insure in anger during the review, but I was wrong. This year I am experimenting with a very large dome port for split-level photos. But despite having months for the build, it was only finished the day before the shoot and it didn't fit on my housing properly, leaking slightly, but consistently. I taped the seals up the best I could and put all the sachets of Leak Insure I had in the housing as insurance. It stayed dry all the time, until the final afternoon on Lundy Island (UK), when it started to leak. I got out immediately the leak alarm went off and found the housing and camera almost dry, but the sachets expanded, suggesting a leak of a couple of more than 100ml (about a third of a coke can).

Leak Insure had kept the camera totally dry. However, while the sachets do not swell with any force, their expansion had jammed them into tight spaces inside the housing. Now wet, the outside of the sachets were weak and when I tried to pull them free they broke open, covering the inside of the housing with messy crystals. Obviously this is not damaging in any way, but annoying to clean up. So a suggested improvement for Leak Insure is stronger packaging for the sachets when wet,



*The sachet that I tested could absorb about 50ml of water.*

although most users won't mind if their camera survives.

Leak Insure's other property is as a desiccant, like silica gel sachets. I have never had condensation problem with a metal SLR housing. But compact cameras in plastic housings can be more problematic, especially when the internal flash is firing a lot, because this heats up the air inside causing it to steam up, particularly in cold water diving. We tried the Leak Insure sachets in several compact housings in the Red Sea and all of them avoided condensation problems. Although in the dry desert heat of Egypt, it wasn't perhaps the toughest test. I also did not do any back to back tests without the Leak Insure. But I have to conclude that using Leak Insure can only be beneficial.

So in summary, Leak Insure works well and is inexpensive (£15 GBP for a pack of 20 – which should last a long time). It is not an earth shattering revelation for underwater photographers, but it is a cheap and useful product (and much less embarrassing and fibrous than the alternative product). Leak Insure are in the process of expanding their network of stockist which currently include UK, Norway, Philippines and Australia, with more dealers being added all the time. They also sell direct from their website, and will post out



*An inexpensive and useful product. I now keep one taped to the base of my housing, just in case.*

to any countries without an official dealer.

In conclusion, Leak Insure is flood insurance we can all afford and may save you from that cocktail of salt water and Japanese electronics, which will always leave a sour taste in the mouth.

**Alex Mustard**  
[www.amustard.com](http://www.amustard.com)

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



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**Events:**

- Scuba Symphony is proud to be co-sponsor and official on site technician for the Timor Leste Dive Photo Contest 10-15 Oct 2010. For more infos and registration, visit [www.underwatertimorleste.com](http://www.underwatertimorleste.com)
- Christmas Shootout 23-31 Dec 2010 in Raja Ampat- Full !!!!
- UW Videography Workshop with Simon Deane 5-9 Feb 2011 in Krabi, Thailand

# Shooting SLR video with Berkley White

By Peter Rowlands

This article is going to be a little different in that, in order to get the most out of it, I will ask you first (if you are online reading this) to click this link and watch the video clip

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

As someone who shoots primarily video underwater I have been watching with interest the new capability of shooting HD footage with the latest SLR cameras. As a result I have been keeping an eye out for clips on the web taken with them and came across Berkley White's footage shot in Cayman of the wreck Keith Tibbetts.

What struck me instantly was not the image quality of the footage (which was excellent) but the beautiful camera movements and steady shots throughout the clip. I have always thought that shooting video with an SLR in a housing which was designed to shoot stills would not work well with video and I wanted to know about Berkley's experience shooting the Canon 5D in an Aquatica housing.

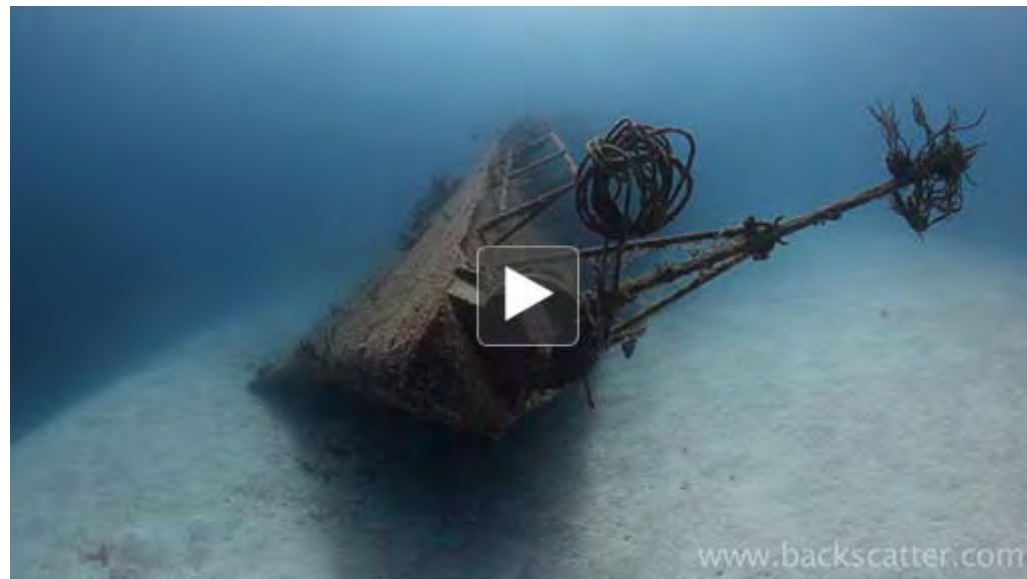
Berkley is the owner and founder of Backscatter in Monterey and I have known him from way back so I e mailed him and asked if he would write an article for UwP about the techniques he used. Berkley's time schedule couldn't fit that in but he suggested I interview him on the phone and write up the article myself.

The result was a hugely enjoyable 20 minutes on the phone with him after I had forward e mailed the questions I was going to ask so he had time to think about his responses.

The following is a transcript of our conversation:

**PR - As a video shooter myself, I've followed your SLR clips on the internet with great interest but I was honestly blown away (and jealous!) of the footage you shot on the wreck Keith Tibbetts in Cayman so I thought I'd contact you to chat about the SLR video format and getting the best footage out of it.**

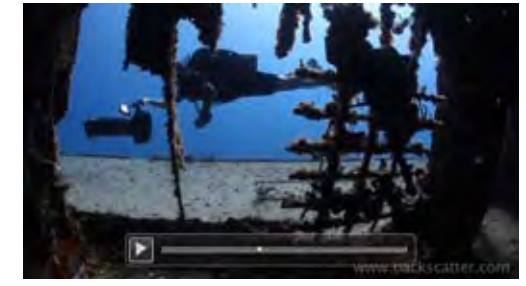
BW – Firstly that's a very kind compliment coming from you and I really appreciate that.



I'm very excited about the new capability of SLR video. The ability to shoot fully manual exposure has not been available on traditional consumer camcorders and it's closer to the capability of much higher end video cameras such as the RED and digi Betacam. But equally as important is the ability to now shoot fisheye lenses. Up until now I had always felt that consumer video cameras couldn't shoot wide enough and it was really this new capability which sparked my interest to shoot video again.

**PR - Having the ability to shoot stills or video with the new high end SLRs is very convenient. Do you use your Canon 5D MkII to shoot stills as well and, if so, how do you prepare mentally to use of each one? i.e. only shoot video**





***one day then stills the next or switch from one dive to the other.***

BW - I completely fail when I switch from one to the other so I get my best results when I shoot the same for multiple days in a row. It reminds me of when I used to shoot stills with a wide angle rig and a macro rig on the same dive and I would get shots that were all mediocre but if I dedicated myself to one or the other and got my brain into groove I would get much better results. And now with video I find it's exactly the same so much so that I will shoot video for multiple days and maybe at the end of a trip I might shoot some stills. It is a sacrifice and I feel I am missing out on some excellent still shots but if I didn't dedicate to video I wouldn't get good footage.

***PR - Are there any drawbacks with the SLR for shooting video? LCD viewing, ergonomics, controls? Your recent clips show amazingly smooth camera movements. Would you be prepared to***

***let us know how that was achieved?***

BW - The ergonomics of an SLR are not totally unlike a conventional camcorder housing in that you have 2 handles on a small box and the hardest technique is to avoid rotational wobble and that takes extreme concentration. Stabilisation plates help dampen the movement but if I'm not mounting the housing on a scooter I'll use a tripod bracket that we make which allows three legs to be added to the base of the housing. I take two of those legs and stick them out to the left and hold them in my left hand and my right hand will be on the housing controlling the camera. That wider grip is a tremendous help in preventing wobble but it still requires good diving practice and concentration so that's why I now use scooters a lot, not necessarily for propulsion but because the extra mass creates a much steadier inertia for me to push or pan with. The added benefit of the scooter is that it can also fly you around when you want but it's most important asset is its stability.

***PR - With the Keith Tibbetts dive in particular, there were 2 of you shooting. Can you remember the total amount of footage shot and how did you manage to get such a popular wreck without divers on it?***

BW - The footage we ended up using was just from my camera and during the one hour dive I shot about 15 – 18 minutes. The biggest challenge on that dive is we had a boat load of 14 other divers all on the same wreck and when we arrived there was another boat of disabled veterans who were being helped along the side of the wreck so it was very congested.

Having the scooters was key. We were able to scoot down to the bow before anyone else got there to get that opening shot and then when the other divers came down we would use the scooters to shuttle ourselves to get on the other side of the wreck away from the divers. The scooters were absolutely essential for that.

And my other trick, which I almost hate to share, is that I really monitor my air consumption because

what I have found is that the first 7 minutes and the last 7 minutes of a dive are the best opportunity of getting shots without other people in them.

***PR - Do you get involved in the editing also? If so is that an enjoyable process and what computer/software do you use.***

BW - Oh boy, I wish I could pass the editing on to someone else! The hardest part with video is having to watch all of your clips and log them accurately. This footage was shot during a Digital Shootout and we try to push ourselves and our clients to edit their video every day so it makes for long days. What I do is preview the clips using Photo Mechanic or Lightroom in Quicktime and tag the ones I want to keep. Then I convert them to Apple ProRes 422 and I use MPEG StreamClip which is a free converter that I find is much more intuitive than Apple's Compressor. I then drag the clips into the timeline in Final Cut Pro and rearrange them into



some sort of cohesive order and then either output them as high res 422 or at lower res for the web.

I am getting used to Final Cut Pro now but it took some time for me. The most important thing is to tag your clips on a daily basis whereas with stills I might wait until I get home.

*PR - If you found an editor you could trust, could you leave them to do this for you so you concentrate on the shooting and they do the editing?*

BW - That would be a dream come true! I would love to work with an editor who was into the underwater environment and its subjects as I am. I would much prefer to shoot the material and have someone else

do the editing as I'm not fully into computers so I would love to hook up with someone who is much more into it and faster at it.

*PR - Hopefully when this article is published you'll get contacted by a bright young editor who's itching to work on underwater material.*

BW - Oh that would be great and I would definitely make it worth their while!

*PR - How do you see the future of video shooting underwater. Do you think we will see cameras and camcorders merge in design so that can shoot both offer good ergonomics or do you think the camcorder makers will up their still quality.*

BW - We're starting to see interesting interchangeable lens cameras like the Sony NEX that are on the right path being able to shoot high quality video and stills but ergonomically they are quite awkward with a small body and a big lens. With the optics available for SLR cameras they will continue to be popular for underwater use but I do see the converging capabilities continuing in that the most popular cameras underwater will all have the ability to shoot both stills and video. However there will always be a place for the conventional camcorder which has better ergonomics, sound capability and accessories for the high end user.

*PR - Berkley, that's been great and I'm sure our readers will find your experience and knowledge of great use. Thanks once again.*

BW - The pleasure was mine!

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Digital cameras have opened up new possibilities to underwater photographers. For available light photography manual white balance is an invaluable tool for restoring colours. But when you use it without a filter you are not making the most of the technique. You're doing all the hard work without reaping the full rewards.

These three photos are all taken of the same wreck in the Red Sea. The left hand image was taken on slide film, which rendered the scene completely blue. The middle image is taken with a digital SLR without a filter, using manual white balance. The white balance has brought out some of the colour of the wreck, but it has also sucked all the blue out of the water behind the wreck, making it almost grey. The right hand image is taken with the same digital camera and lens, but this time using an original Magic Filter. The filter attenuates blue light meaning that the colours of the wreck are brought out and it stands out from the background water, which is recorded as an accurate blue.

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

# Over/under photography

By Peter Verhoog

I have always been a great fan of this kind of photography. It gives you an opportunity to establish a visual relation between the worlds above and below the surface. And they can also be very funny. When traveling in the Netherlands and abroad, my wife Georgina Wiersma and I are always looking for situations that we can use for a 'new' shot.

During an assignment on Aldabra (Seychelles), it was my task to take pictures of a group of children, who had won a trip to this gigantic atoll in a contest about the environment. They had to explore the Aldabra Atoll and all its creatures, above the surface, but also in the water. As I had visited the island before, I knew the lagoon was often full of young black reef sharks. I decided this was a shot I had to make... the children in the water, surrounded by sharks. My wife was a bit hesitant. As an experience shark diver, she knows sharks are not dangerous, but she was afraid that the children would fall over or make unexpected moves, that could cause the sharks to bite.

It took some persuasion to get the kids into the water, but finally, I could start taking pictures. One of the

pictures I made has been used many times in all kinds of publications, including our own last book: Sharks - Close Encounters.

The Seychelles offered me more exciting photo opportunities, like the circling sharks, the wonderful turtle in a magnificent lagoon and the 'Bijoutier coconut', a very 'staged' shot. After a conversation with some other guests, about the way coconuts are distributed among the Seychelles islands. Many coconut palms grow beside river or the sea, and drop their seeds into the water. The seeds float in the water, often with the new shoot emerging, until they reach soil or a sandy beach where they can take root and grow into a tree. We decided we definitely had to illustrate this process. Our first step was finding the perfect seedling. We roamed the island of Alphonse, looking for our perfect subject.

When we had finally succeeded, we asked our boat driver to make a stop at the lagoon of Bijoutier, a kind of uninhabited 'paradise island'.

*(Top) Nikon D70, Sealux housing, Nikon 10.5 mm f/10 @ 1/250 ISO 200*



## "The ins and outs of over under"

*Clean the dome of the underwater housing thoroughly with a detergent without lemon. Rinse the dome carefully without touching it (and do not touch it at all before you're finished). All drops of water will run off the glass smoothly. Check the dome regularly to see if there are drops and the glass, and shake the housing a bit to remove them.*

*Before taking a picture, measure the light above and under the surface. Calculate the average of these two f/stops and set the camera to the average f/stop. With a automatic (pocket camera), the camera will determine the f/stop.*

*As the subject under water is 'closer' to the camera than the subject above the surface, it's a matter of experimenting to get the whole picture sharp. Testing this beforehand, for instance in a swimming pool, is the way to achieve this.*

*It's best to use a fisheye lens.*



*(Top left) Nikon D70, Sealux housing, Nikon 10.5 mm f/9 @ 1/500 ISO 200*

*(Above) Nikon D70, Sealux housing, Nikon 10.5 mm f/10 @ 1/320 ISO 200*

*(Left) Nikon D70, Sealux housing, Nikon 10.5 mm f/8 @ 1/500 ISO 200*

Unfortunately, the tide was extremely low, so we had to walk through the lagoon all the way. We expected this journey to last around 15 minutes, but in reality it took 40 minutes under the blazing midday sun. We were carrying snorkel, mask, fins and water and had our heads covered. When we got close to the island, we heard the cries of the white fairy tern. Still panting, I started taking pics immediately, as the tide was still dropping rapidly. Georgina made a small dam with her fins as there was a nasty current going out

and the coconut was bopping on the water. Walking back to the boat took us another 40 gruesome minutes. We drank all our water, and we started seeing strange black shadows. But at least, we had the shot.

During another assignment on the Seychelles, with a research team of National Geographic, I took the shots of the groupers on a fishing line and the floating piece of bamboo with the barnacles. These shots have totally 'different' subjects, and stand out among all the normal 'underwater



*(Top left) Nikon D70, Sealux housing, Nikon 10.5 mm f8 @ 1/500 ISO 200  
 (Above) Nikon D70, Sealux housing, Nikon 10.5 mm f8 @ 1/320 ISO 200  
 (Left) Nikon D70, Sealux housing, Nikon 10.5 mm f9 @ 1/320 ISO 200, 2 Nikon SB 800 strobes*

shots'. I love making them, they show the subtle beauty on the boundary between water and air.

I met my final over/under challenge when the editor of the Dutch National Geographic Magazine asked me to do a small 'over/under' portfolio. But... he wanted Dutch subjects. The magazine already published the picture of the Egyptian geese previously, as an illustration for an article on non-endemic species in the Netherlands, written by Georgina.

I decided I had to 'go Dutch' all the way and started looking for typically Dutch subjects. The water lilies made a nice picture, but it took a long time in the water before I could finally 'capture' a bee in the shot. The red river lobsters (imported from the United States, that have now colonized many Dutch sweet waters) lived in the same city pond. We do not have clear waters here, and it is difficult to get a clear shot, that shows the world above the surface and the



world under the surface. Thinking of Holland, many people think of windmills. I had to walk many meadows before I found a windmill that overlooked a ditch with water lilies.

My 'piece de resistance' however was a nesting toot. It took me nearly three days in a dirty canal before the bird was used to me, and allowed me to take pictures. Half the fun was waiting for the streetcar to appear in the background, but every time it rode by, the toot would look at it, nearly spoiling the picture.

When I presented the picture to the editor of National Geographic, they asked me how I made it and

how close I could get to the bird. 40 centimeters (16 inches), I told them. They thought it impossible to approach a toot this close and asked me to show the NEF file, which I did.

The picture made it to the final of the Wild Photographer of the Year contest, but was unfortunately not awarded. Next time better!

When the portfolio was finally published, I got countless mails from topside nature photographers. All of a sudden, they were interested in over/under photography....

**Peter Verhoog**  
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# Digital Infrared Photography Underwater

by Kathy White

Digital infrared photography underwater? It's not possible, surely? This was the general consensus when I spoke to people about doing infrared photography underwater. Fortunately a very wise friend told me to think positively and give it a go anyway. After all, what did I have to lose?

## What is infrared (IR) light and where does it come from?

Light is measured in waves and the light spectrum is made up of both visible and invisible light. Visible light ranges from about 400 nanometres (nm) to 700 nm on the spectrum. Beyond 700nm up to about 1200nm is referred to as near infrared light.

The near IR light is the light that we can capture with a camera, either by having one converted or by using an IR filter.

A common misconception is that the IR light we can capture with a camera is similar to thermal imaging; however thermal imaging is between the ranges of 7,000nm to over 14,000nm on the light spectrum. To capture this requires specialist, very expensive equipment.

As with any other kind of light the sun is the biggest source of IR. As underwater photographers, we know that the first colour to be absorbed in water is red, hence the natural doubt as to whether it would be possible to capture it.

As with visible light, the speed that it gets absorbed will depend on many factors, including the time of day, surface waves, clouds, depth etc

Whilst doing some research for this article, I read somewhere that all flashguns omit IR light. I am no scientist or technical expert so I would like to say 'most' flashguns (just in case yours can't for some reason!) could omit IR light, including my Inon Z240's.

## How to record IR light

Most digital cameras are capable of recording small amounts of IR light. However they are fitted with a filter to block this allowing only visible light through.

One option to record IR light is to attach an IR filter, for example the Hoya R72, to the lens. This will block any visible light and only allow the IR light to pass through. Long exposures are needed so it is impractical underwater but is a valid option on land assuming you have a sturdy tripod!

The other option is to have a spare camera body converted for IR. Once it has been converted it can no longer be used as a normal camera unless you have it converted back.

There are 3 main stages to the conversion process:

Camera sensors are fitted with an IR Cut Filter (ICF), also known as a hot mirror filter. The first



*Reef and snorkeler  
Nikon D300 converted for infrared, Subal housing, 2 x Inon Z240 strobes, Tokina 10-17mm, f3.8, 1/30 sec, ISO 400*

stage of conversion is to remove this.

The second stage is to fit a filter to restrict the visible light. You can choose the level of filter that you would like. A comparison of the different effects is available on lifepixel.com. The most

common is the 720nm filter, which still allows a small amount of visible light through to enable colour infrared photography.

The final step is to re adjust the focus as IR wavelengths are longer than visible ones and therefore focus at a different point.

I had a Nikon D300 converted with a 720nm filter by Advanced Camera Services ([www.advancedcameraservices.co.uk](http://www.advancedcameraservices.co.uk)). Conversion prices start at £250 plus VAT.

Lifepixel ([www.lifepixel.com](http://www.lifepixel.com)) in the USA also offer a comprehensive conversion service.

Please note that not all models are capable of being converted so please check with a company like ACS or Lifepixel before you go out and buy a new camera body!

### So what happened underwater?

The most obvious feature of IR photography on land is that foliage reflects IR light and therefore this shows up as shades of white. Water absorbs it and so shows up very dark, as do deep blue skies.

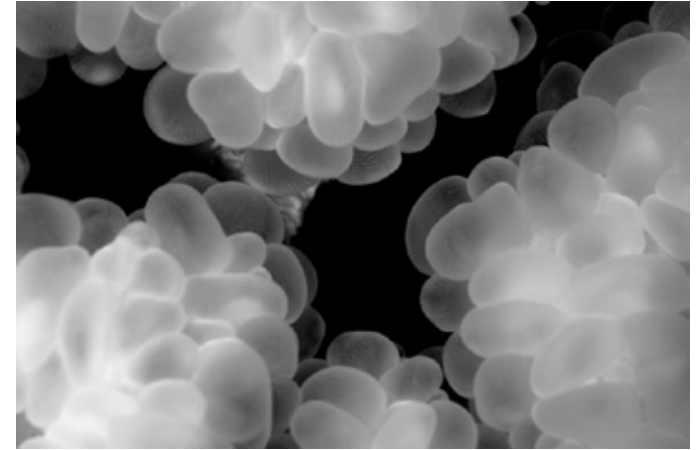
With this in mind, I guessed that underwater my backgrounds would predominantly be black past about 5m and I would rely upon my Inon's to provide the IR light.

On land I would set the white balance manually using some well-lit grass as my reference. Underwater, as I wasn't sure what would happen, I left my white balance on automatic.

I thought I'd start by shooting into the blue and seeing what, if any, ambient IR light was about. The shot was black. OK, so I was at about 15m so it was no real surprise. I opened the aperture right up, slowed the shutter speed right down, increased my ISO and tried again. Black.

*(Right) Soft corals  
Nikon D300 converted for infrared, Subal housing, 2 x Inon Z240 strobes, Nikon 60mm macro lens, f11.0, 1/160 sec, ISO 200*

*(Below) Clownfish and anemone  
Nikon D300 converted for infrared, Subal housing, 2 x Inon Z240 strobes, Nikon 60mm macro lens, f16, 1/160 sec, ISO 800*



Summary – no infrared light down here, no big surprise! I would try again when I was back nearer the surface.

The next thing for me to try was to light some corals using the IR light from the flash - success. I used my equipment in exactly the same way I would do normally, except I had to use wider apertures and higher flash settings. Exactly how much will depend on distance from the subject, aperture, conditions etc

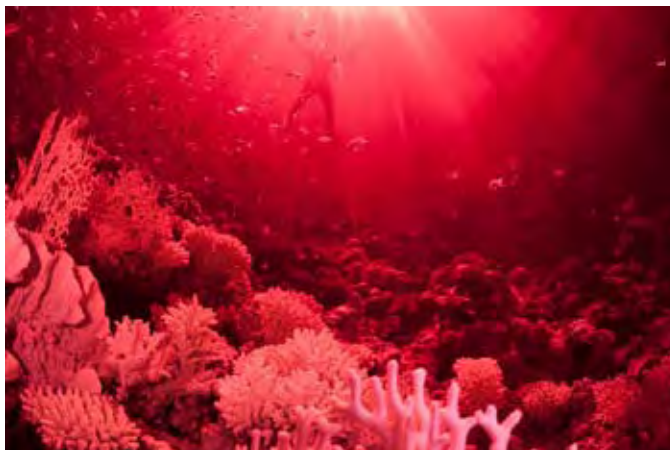
A brief opportunity with a lionfish worked well, taking full advantage of the blue background that I knew would look black on screen. By this point, I was excited and convinced that it would work. Before I knew it my hour was up and I headed back to the boat. My plan for dive two was to stay shallow and go for some natural light shots.

By the time I got in for the next dive it was late morning and the sun was high in the sky. Normally, I would rarely attempt to shoot up to the surface directly into the sun at this time of day but the very limited IR light about allowed me to do just that. I took several shots of snorkelers on the surface from about 7m before ascending slightly and taking some images of the corals.

So far, so good so I decided I would have a go at some macro on the next dive.

The site I chose was Anemone Reef, which was covered in anemones. I spent most of the dive taking some images of the anemone fish ‘dancing’ above the anemone. I was between 15 and 20m for most of the dive, so getting the black backgrounds was very easy.

Now that I had my images I needed to process them.



*Snorkeler and corals – unprocessed image straight from camera. Nikon D300 converted for infrared, Subal housing, 2 x Inon Z240 strobes, Tokina 10-17mm, f3.8, 1/30 sec, ISO 400*



*Snorkeler and corals - processed image Nikon D300 converted for infrared, Subal housing, 2 x Inon Z240 strobes, Tokina 10-17mm, f3.8, 1/30 sec, ISO 400*

## Processing techniques

I processed the images in the same way that I would for land ones. There are two main methods I use depending on if I want a colour or black and white image.

The black and white process is easiest as this is done in the same way as you would convert any other image to black and white. I prefer to do mine in Photoshop using the Black and White Adjustment. I would then apply minor adjustments to contrast and curves as required. There are of course a number of ways you can do this depending on what you are familiar with already.

For the colour images, I use the Channel Mixer in Photoshop and swop the red and blue channels over. For land images this produces blue skies and water and leaves the foliage white. Underwater it turns most of the image blue!

Depending on which filter you have fitted in the camera will depend on the final colours. Personally I prefer the 720nm filter, as the colours are subtler.

## Summary

Although some of the effects could probably be achieved with a normal camera in post processing, I don't like to spend too much time at the computer and would far rather get it as right as possible in camera without the need for lengthy processing.

Having said that, there are several areas where I believe you can achieve results that you couldn't with a normal camera.

Firstly, you are able to shoot almost straight into the mid day sun at shallow depths without over exposing the highlights and / or under exposing the foreground.



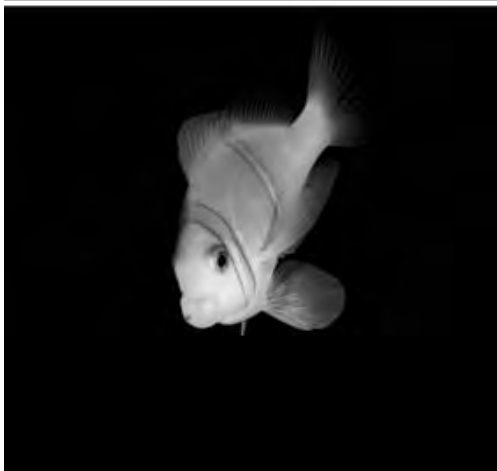
*(Left) IR Anemone.jpg  
The top image is straight from camera with no processing apart from cropping. The second image has been processed by swopping over the red and blue channels in Photoshop. The final image has then been converted to B&W using Photoshop.*

*Nikon D300 converted for infrared, Subal housing, 2 x Inon Z240 strobes, Nikon 60mm macro lens, f8.0, 1/160 sec, ISO 200*



*(Right) Infrared shot taken on land and converted by swopping over the red and blue channels in Photoshop*

*Nikon D300 converted for infrared, Nikon 17-55mm f2.8 lens, f16, 1/60 sec, ISO 100*



Secondly, you can create wide-angle black backgrounds with ease during the day meaning that you can skip the night dive. This may not be a bonus for most but it is for me!

Thirdly, you can create black backgrounds much easier with macro, despite what you may be shooting into.

Finally, I have found that you get a much greater tonal range with IR, which is an effect I personally really like. I have taken images of the same scene on land with both my IR and my normal camera and have been unable to replicate the effect in Photoshop, despite several attempts. Having



said that, my Photoshop skills are somewhat limited so maybe someone with better skills may have more luck!

Although I am still in the very early stages of experimenting with this, I have been really pleased with what I have got so far and I'm definitely going to be doing more of it. My next dive trip is fast approaching and my IR camera is already in my kit bag.

I find it fascinating that we can photograph something that we can't see and I still occasionally get a surprise when I press the shutter, as things are never quite how you think they are going to be!

**Kathy White**

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# Shark Shootout

by Joseph Tepper

As underwater photographers we are often conflicted between choosing subjects that we may find interesting and those which will captivate our audience. You could spend countless hours underwater with a sailfin blenny, only to receive little more than a befuddled look from your landlubber friends, as the perfect shot appears in a montage of your latest trip. Disappointed with the abysmal reaction to the well-earned shot, you find little comfort in the “ooh’s” and “ahh’s” that accompany the next slide; a poorly exposed shot of a small grey reef shark. We might as well face the cold hard truth: in a world where an entire week of television dedicated to these majestic predators permeates the minds of even the most landlocked viewers, that shot of the blenny does not stand a chance. Such is the underwater photographer’s dilemma. As ambassadors between the world below the waves and our own, we must often reluctantly follow the infamous words of a former French queen, and “let the people eat their cake”.

Aboard the Turks and Caicos Aggressor liveaboard, with the ever professional and entertaining crew

of the Jim Church School of Digital Underwater Photography, I had this very opportunity to bring home the allegorical “cake”. Putting my gear together on the first day of diving, I found myself motivated to produce some shark images that would not only impress my friends back home, but even make my fellow underwater photographers green with envy. Needless to say, this is easier said than done. In my (albeit young) diving career, I had never successfully captured an image of a shark with which I was truly satisfied. As divers we understand the reality that, in contrast to the programs featured in “Shark Week”, sharks are often more put off by our foreign presence than we are by them. It is rare to find a shark willing to swim close enough for a good shot, much less a participant to repeat the action.

In a recent article from the January edition of Scuba Diving Magazine, which debated the benefits and consequences of feeding sharks, one expert argued that such action actually encourages further education from divers and non-divers alike. Disregarding individual opinions on the ecological impact



*The money shot of the week: while luck certainly plays a role in getting the best pictures, you will find that luck is a matter of practice and preparation. Nikon D300s in Sea and Sea housing with 16 mm lens and dual y110a strobes at full power ISO 200, 1/250th at f9.*

of these practices, shark feeding can be quite beneficial to underwater photographers as it provides almost guaranteed shark action and encourages the animals to stick around for photographic adjustments. Although many safe diving operators use chumming to attract the sharks, some have adopted a safer method that does not encourage the animals to relate food with humans. This new strategy consists of a semi-enclosed

metal triangle, whose contents of frozen fish provides the necessary scent to attract the main subjects, while helping to ensure a safe photographic environment for both all parties involved.

Location, location, location. Achieving success at a “shark shootout” often starts with finding the right position in the underwater arena. Being first on the scene is not only the easiest, but also the most



*Thanks for an incredible week to the crew of the Turks and Caicos aggressor as well as Mike and Mike from the Jim Church School of Digital Underwater Photography. (Photo courtesy of Mike Mesgleski)*

beneficial approach to find the right spot. As soon as the fish is in place, the best location may be near the source of the scent, making sure to exhibit caution in proximity to the shark and the bait. However, as more divers and sharks arrive on scene, your positioning must evolve to avoid unwanted bubbles or backscatter in your shots. You've heard the old adage about being circled by sharks? Well its mostly true; except that in my experience the sharks will follow more of a figure eight pattern to investigate the commotion. By putting yourself at the perimeter of this pattern and facing outwards, you have the opportunity to repeatedly shoot the sharks with a more pleasing negative space and more importantly, some stunning pictures!

Before shooting away, it is important to review some of the unique aspects of metering and lighting sharks. Unlike many underwater subjects, the agile sharks require very high shutter speeds (most likely



*In addition to the sunball in the background, I like the composition of this picture because the shark's eye lies almost exactly on an intersection for the rule of thirds. Nikon D300s in Sea and Sea housing with 16 mm lens and dual y110a strobes at full power. ISO 200, 1/200th at f18.*

the max flash synch speed) to freeze their action completely. It is good start to set your shutter speed around 250th, varying to meet individual conditions or to experiment with blurring or other artistic effects. As for aperture, it really depends what you're trying to accomplish with the background blue as well as your individual situation (depth, time of day, location, etc). Students in the Jim Church School of Digital Underwater Photography learn quickly that when taking a picture with a strobe you are (in effect) taking two pictures one on top of another. If you are looking to take a shot with just a standard blue background, then you might want to meter for that blue (perhaps shooting for 2/3's of a stop underexposed). In clear Caribbean waters it is a good idea to start in the rage of 5.6-8, and then adjust to your personal definition of true blue water.



*Black and white can be a nice touch when shooting sharks. Sometimes the best black and white shark shots are the ones that are pre-visualized before converting them in post processing. Nikon D300s in Sea and Sea housing with 16 mm lens and dual y110a strobes at \_power. ISO 200, 1/200th at f8.*

After finding a background blue that meets your individual taste, while maintaining a shutter speed that stops the shark's action, strobe position is the next major concern. At the start of the trip I began with a standard strobe positioning for traditional wide angle photography: arms extended on each side, with strobes at 10 and 2 o'clock. However, as the week progressed and I allowed the sharks to come closer, I found that moving the strobes to a lower angle (more like 8 and 4) eliminated unwanted shadows underneath the subject. One major challenge of lighting sharks with strobes is finding the right position and settings that will properly light the dark dorsal side without over exposing the white underside. The best way to handle this problem is to keep one strobe over to correctly light the darker features of the back and

face, while moving the second strobe to a lower position to independently eliminate the shadows on the underside.

Once you are comfortable with exposing sharks against a plain background, you might want to spice up your shots with a sunburst or two. Shooting sharks and sun balls can be challenging: the main problem lies in being able to freeze the action of the shark and perfectly expose the sun ball, while sufficiently lighting the shark with your strobes. In order to capture strong sunbursts we need to have a high shutter speed (good thing that sharks require a high shutter speed anyways) and a high f-stop for that ideal spherical shape. Unfortunately, these settings can result in a poorly exposed shark. In order to compensate for the camera's exposure settings you may need to start with your strobes at full power, adjust as needed, and (you guessed it) get closer! Another problem can be finding the proper angle at which to compose a shot with both the sun and the shark. The best time of day for such shots is in the morning and late afternoon when the sun is lowest on the horizon. However, as the sun begins to rise higher into the sky, it is nearly impossible to compose a shot with the shark and sun burst. In environments featuring less favorable lighting conditions it can be helpful to increase the ISO as not to compromise the high shutter speed or aperture needed for the sunburst and shark's speed.

One reason behind the universal allure of shark images, in addition to the iconic image associated with these animals, is the result of one basic rule of photographic composition in action: the human eye is drawn to curves. Because of this, it is vitally important (in most cases) to include as much of the shark in the shot as possible. Capturing the perfect



*When using food to attract sharks, you will find that sometimes nurse sharks will sneak into the chaos and try to suck the food out of the container. Such behavior gave me the perfect opportunity for several close up shots of the shark's eyes and denticles. Nikon D300s in Sea and Sea housing with 60 mm lens and dual y110a strobes at half power. ISO 200, 1/125th at f22.*

composition of a shark is not always dependent on the photographer's patience. In fact, the best strategy can be to fire off as many shots as possible when the shark enters the range of the strobe (keep in mind that your strobe will take longer to recycle to full power, resulting in only a couple of shots for each shark).

For the most part, a 16mm fisheye or a comparable lens is most effective in shooting wide angle with sharks as it keeps the majority of the shot in sharp focus, while forcing the photographer to get closer to the subject. The increasing popularity of zoom lenses, while useful for shooting more timid subjects, has little utility with sharks that will



**Grey Reef Shark**

*Maybe the result of the boredom of off-gassing rather than artistic inspiration, using photoshop to have the shark pop out of the frame creates a 3D effect. Nikon D300s in Sea and Sea housing with 16 mm lens and dual y110a strobes at 1/3 power. ISO 400, 1/160th at f5.6.*

repeatedly be within a few feet. However, wide angle lenses aren't the only way to capture the intensity and rush of a shark encounter. Shooting with traditionally macro or intermediate lenses, such as a 60mm, can be used to capture powerful images of shark profiles. In one profile shot, I turned off my right strobe, side lit with the left, and cranked up the F-stop, creating a very dramatic effect.

Another unique approach, shooting shark silhouettes, allows the photographer to meter for a natural light exposure without worrying about using strobe light. The difficulty of this technique lies in actually finding the correct body position to capture



*Another busy week for the Jim Church School of Digital Underwater Photography. Organization is key on any dive trip, but without question it is a crucial element for success on a crowded boat. (photo courtesy of Mike Mesgleski)*

*Who says sharks cant fly? Capturing movement and poise is an important quality to any shot, especially one without close eye contact. Nikon D300s in Sea and Sea housing with 16 mm lens and dual y110a strobes at full power. ISO 200, 1/250th at f14.*

the underside of the shark with the sun either directly behind or partially masked by the subject (using 45 degree viewfinders is a great advantage). Lying flat on my back in the sand, in my initial attempt to achieve the best possible angle, I quickly realized that this maneuver is as ineffective as it is inelegant. In contrast, standing just off the nearby wall provides the maneuverability needed to incorporate the sun directly behind the subject. Of course, if such a drop-off is not available, you are welcome to try the more awkward and backbreaking positioning previously mentioned.

Of course, as is the case with any underwater

subject, a pinch of luck can be equally as important as any other number of factors. My favorite shot of the trip, which features a large Caribbean reef shark and a friendly green moray eel, is a perfect example of such a phenomenon. In this case, there were numerous elements that culminated into the overall effect of the shot: the curved and diagonal composition of the shark, the eel at the bottom, the hook in the shark's mouth, and even the half-sunburst at the top. I would love to say that sitting on the boat before the dive I planned the entire shot, but to say that would be far from the truth. In fact, the real credit for this shot should be given

my buddy who pointed out the eel on the opposite side of the coral, which inspired me to compose the shot as seen in the final image. Putting the shark shooting routine practiced during the trip into effect, I metered the blue, framed the eel and sun, and to waited patiently for the shark to come into frame.

A few weeks later, my family and friends sit motionless through my slide show of the trip, as images of blennies, pipefish, and juvenile spotted drums flash by with little reaction as I expected. The picture of the shark and eel pops up accompanied by a crescendo of "oo's" and "ahh's". However, I am no longer frustrated by this clear incidence of favoritism. For one, I am comforted to know that this picture, captured in only a one hundredth of a second, compensates for many years of practice and failure. For another, if I am ever again disheartened by the lack of appreciation for my beloved macro subjects, I need only remember the moment when my buddy glanced at that photo displayed on my camera's screen during the safety stop. The regulator nearly fell out of his mouth.

**Joseph Tepper**





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# Caves of La Palma

by Glenn Lawyer

It was one of those days that reminds one why life is worth living. Lorimer, a giant of a Spaniard, pilots the red zodiac up the coast. Georg watches for debris from the bow, holding the bow rope for support with a hand-rolled cigarette in mouth and the arms of his semi-dry flapping around his legs. The 4 other divers are vacation friends, people who share my habit of booking their Easter vacation on La Palma, the emerald gem of the Canary archipelago.

We are headed for the Cuevos de Agua, a group of caves which lie just north of Tazacorte. They formed when flowing lava left behind tubes and chambers in the cooling rock. Until very recently, this area was only accessible through local dive clubs. By making alliance with one of these clubs, Georg can now offer them to his clients.

The cave dives offer unique photographic opportunities. With a maximum depth of less than 15 meters, photographic skills remain unaffected by the “stupids of the deep.” Nor are the caves technically challenging. The only caving gear we brought was our torches. And as they are on the west coast of La Palma, the sun is shining and the sky is free of clouds, creating some beautiful patterns of light near the entrances. Sunbeams and silhouettes were my goal for the day.

A few minutes later we drop anchor in a little cove where high cliffs plunge into the sea. A roll into the blue and a short swim takes us through a large stone arch, the gate to the hidden realm. Here the sea has cut into the cliff base, leaving



*(Above) While the entrance is narrow, the interior and exit of the cavern is huge. f4.5 at 1/180 and ISO 200*

*(Top right) Lorimer patiently waiting for a slower diver. The rest of the group has moved on. f6.7 at 1/15 and ISO 200*

*(Right) Lorimer lights up the Devils Cave. f4.0 at 1/60 and ISO 200*

*All images: Canon 7D in shutter speed priority mode w/ Tokina 10-17 at 13mm, Aquatica housing w/ 8” dome.*

many hollows and overhangs. The sunbeams filter and dance in the channel, and the overhangs make beautiful triangular frames around the divers.

A small cave mouth appears on the right. Georg and I enter together, side by side. After 4 meters it narrows. George waves me ahead. Three kicks in and up take me into a giant cavern. I am in the womb of the earth. The other divers slowly enter. Torches begin to light the gloom. The cavern easily swallows all seven of us. We split into small groups, exploring the side chambers.

The focus lights on my Inons flit across a 60



cm long lobster, the biggest I have ever seen in the Canaries. It is out in the open, slowly scuttling across the rocky floor, stealthily moving away from my progress. It clearly doesn't enjoy the flash of the strobes, but neither does it dart for cover. I readjust my position and try a different angle.

The other large residents of the cave are a sad lot of common stingrays. The rays sometimes get tangled in the nets of the local fishermen. The response is swift and brutal-- the tail is cut off, and the ray tossed back into the water. Yet this



*Georg is all smiles after the dive.  
f8.0 at 1/180 and ISO 100*

procedure retains some mercy, as the rays often survive. The ones dwelling here are fully grown, two meters in length. One rests now in one of the side chambers, eyeing me suspiciously. I could approach close enough for a photo, but its woeful look and sad condition makes me unwilling to disturb it in its refuge.

Back on board the boat, we pass around smiles, snacks and water. As the surface interval draws to a close, Lorimer fires up the engine. We motor south for 5 minutes, and anchor outside a narrow channel leading up to the Devil's cave. The channel is too narrow and wave-tossed for a boat, but at 5 meters depth it is calm enough to swim. Lorimer leads us up it to the cave entrance.

The cave is called the Devils cave. At low tide, the roof of the entrance is only 5 centimeters above the waterline. Waves push fresh air inside the cave, creating a deep guttural roar, "the Devil calling." The air inside is warm and humid. When a wave hits outside, a cloud of vapor rises from the surface.



*The cave is inhabited by several large spiny lobsters. Their response to my focus lights was to slowly back away. f4.0 at 1/250 and ISO 200*

The air chamber is narrow but long, extending 15 meters or more back into the mountain. A second chamber lies beyond. Deeper we did not go.

The next cave contains a freshwater spring. Rainwater percolates down through the mountain until it comes to rest on top of the saltwater in the cave. The division is marked by a distinctive blurring in the water; a very clear thermocline. Lorimer is big, two meters tall. In the water, he conveys the grace and power of an orca, while on land he has the joy and laughter associated in childhood with images of dolphins. His background is 15 years experience as a commercial diver, all in the Canary Islands. Maybe this is what made him such a refreshing guide-- not trying to take charge of or control the group, just there and if needed. And he did provide me with a much needed rescue. We were on the deck of the Bussard, on my last diving day. I was caught in a sink of depression. Lorimer came over, stuck one of the ear-buds from his mp3



*The biologist inspecting some interesting life forms in one of the side chambers of the main cavern. We have now been in the cave over 10 minutes, and levels of silt are still remarkably low. f4.0 at 1/125 and ISO 200*

player into my ear, and made me sing disco classics with him until I was smiling again. I had been saved from a severe "out-of-music" emergency.

Georg continues to build his business (<http://www.tauchpartner-lapalma.de/>). His partnership with Lorimer is new, as is a weekly cruise on the wooden charter boat Bussard. This allows dives in otherwise restricted areas of the marine reserve. In addition to expanding the range of dives offered, George continues to explore the marine biology of the island. Shortly before my arrival he had found a species of black coral not previously known to live in the Canaries. Identification is still underway.

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# Lobelia lakes

By Ole Pedersen

Few men consider the possibility of natural aquascapes that are so beautiful that even Takashi Amano would find a challenge to mimic it in his studio. But the underwater landscapes of many lobelia lakes in the northern hemisphere are exactly like that – an aquascape that most people could only dream about. This article describes the fascinating flora and fauna of these lakes which are scattered all over Scandinavia. And did you know that one of the plant species has found its way into the planted aquarium hobby?

Nutrient-poor lakes are found scattered throughout Scandinavia. They are either rain-fed or fed by seeping groundwater or by a combination of both. They rarely receive water from inflowing streams and many have even no runoff; instead, the water level fluctuates according to the balance between precipitation and evaporation. Some lakes are nutrient-poor because they are formed directly on the inert bedrock and others because they found on sand and gravel deposits left behind by the receding glacier more than 10,000 years ago. These lakes are not only nutrient-poor, they are also

*Nutrient-poor lobelia lakes are found scattered throughout Scandinavia. They are either rain-fed or fed by seeping groundwater or by a combination of both. They rarely receive water from inflowing streams and many have even no runoff; instead, the water level fluctuates according to the balance between precipitation and evaporation.*

*Camera: Canon 450D, lens: Canon EF 100mm USM, aperture: 7.1, shutter speed: 1/125 and ISO: 100.*

*The key species in lobelia lakes is the Water Lobelia (*Lobelia dortmanna*). In shallow water, the peduncle elongates above water and pale-blue flowers are pollinated by terrestrial insects.*

*Camera: Canon G7, housing: Ikelite, lens: Ikelite W-20, aperture: 4.0, shutter speed: 1/125 and ISO: 200.*

very soft with a carbonate alkalinity of less than 0.1 m moles per litre (< 0.3 °KH). These nutrient-poor softwater lakes are termed lobelia lakes as the submerged rooted vegetation is often dominated by the otherwise rare plant, *Lobelia dortmanna*.

The common name of *Lobelia*





*Often, there is only one species of fish present in lobelia lakes, the arctic trout (*Salmo trutta alpinus*). Adult specimens are found cruising around looking for larvae of May Flies or Stone Flies – or for terrestrial insects trapped on the water surface.*  
*Camera: Canon G7, housing: Ikelite, lens: Ikelite W-20, aperture: 4.0, shutter speed: 1/200 and ISO: 100.*

dortmanna is Water Lobelia and it belongs to a group of plants termed isoetids that dominate the vegetation in lobelia lakes. Isoetids share both morphological and physiological features even if some belong to the group of fern allies (a general term covering a somewhat diverse group of seedless vascular plants that are not true ferns) such as *Isoetes lacustris* and *Isoetes echinospora*, while others are true flowering plants such as *Lobelia dortmanna* and *Littorella uniflora*. Over million of years, the environment has shaped the plants in way so that they look almost the same although they are not genetically related at all. They are all small, rosette-forming species with short, stiff leaves and un-branched roots. Physiologically, they all depend on root-uptake of CO<sub>2</sub> because the water column is so scarce in CO<sub>2</sub> so that no plants can rely at this source for their photosynthesis. Instead, the



*The European Crayfish (*Astacus astacus*) is common in lobelia lakes. It is primarily detritivore and feeds on dead organic matter but occasionally also fresh plant material.*  
*Camera: Canon G7, housing: Ikelite, lens: Ikelite W-20, strobe: Ikelite DS51, aperture: 2.8, shutter speed: 1/60 and ISO: 100.*

isoetids tap into the rich source of CO<sub>2</sub> which is always present in the sediment due to the microbial activity that constantly mineralizes organic matter and turns it into energy and CO<sub>2</sub>. Isoetids are weak competitors and thus, they are only found in these ultra nutrient-poor softwater lakes where no other aquatic plants present a competitive challenge.

All isoetids tolerate periods of desiccation. Water Lobelia rarely produces specialized aerial leaves, while both species of *Isoetes* and *Littorella uniflora* produce leaves with stomata when in air. This allows them to gain access to the rich pool of CO<sub>2</sub> in the atmosphere and they can grow for months on dry lake banks. *Littorella uniflora* only flowers when in air but it readily spreads via



*In deeper water, the peduncle of the Water Lobelia (*Lobelia dortmanna*) never reaches the water surface. Instead, it stops elongating and the flowers are self-pollinating in these deep populations.*  
*Camera: Canon G7, housing: Ikelite, lens: Ikelite W-20, aperture: 4.0, shutter speed: 1/60 and ISO: 100.*

runners so the sexual reproduction is only needed to maintain a genetic diversity in the population. In contrast, Water Lobelia only reproduces by seeds and it normally attempts to put up a long peduncle with pale-blue flowers that are pollinated by insects. If the plants grow in too deep water, the peduncle stops elongating long before it reaches the surface and in this situation the flowers self pollinate.

Other plants do co-exist with the isoetids in the nutrient-poor softwater lakes. Examples are species of the carnivorous genus *Utricularia* (Bladderwort), the genus of *Elatine* (Waterwort) and several species of aquatic mosses. These plants all have in common that they are weak competitors as well and thus, they co-exist with the isoetids and



*Elatine hexandra* is found in very shallow water and even tolerates periods of desiccation. It flowers under water with tiny flowers which are only 1 mm in diameter. *Elatine hexandra* is quite similar to species of *Glossostigma* (a genus from Australia which is widespread in hobby) but *Elatine hexandra* is not really suitable in tropical planted tanks as it thrives best below 20 °C.  
**Camera:** Canon G7, **housing:** Ikelite, **lens:** Ikelite W-20, **strobe:** Ikelite DS51, **aperture:** 2.8, **shutter speed:** 1/60 and **ISO:** 100.

present no immediate risk in terms of over-growing the slow-growing isoetids. Bladderwort and species of aquatic mosses often form the depth limit of the aquatic vegetation. Neither bladderwort nor mosses form true roots and thus, they do not have to supply a significant belowground biomass with energy or carbohydrates; this is likely the reason why their light

requirements are lower than those of the rooted plants. In contrast, *Elatine* is found in very shallow water and even tolerates periods of desiccation. It flowers under water with tiny flowers which are only 1 mm in diameter.

The nutrient-poor softwater lakes never support a huge amount of fish or invertebrates as the fauna



*In July, Water Lobelia (Lobelia dortmanna) produces hundreds of peduncles per square metre. Some of them reach the surface where they are pollinated by terrestrial insects while those who are growing in deeper water rely on self-pollination.*  
**Camera:** Canon G7, **housing:** Ikelite, **lens:** Ikelite W-20, **aperture:** 4.0, **shutter speed:** 1/100 and **ISO:** 100.

is also nutrient limited. Often, there is only one species of fish present in these lakes, the arctic trout (*Salmo trutta alpinus*), which is a subspecies of the Brown Trout. Juveniles are rare but a few large adult specimens are often found cruising around looking for larvae of May Flies or Stone Flies – or for terrestrial insects trapped on the water surface. Perhaps

a bit more common is the European Crayfish (*Astacus astacus*) which is a detritivore feeding on dead organic matter or even fresh plant material. However, the European Crayfish is highly threatened all over Scandinavia by the pathogenic mould fungus, *Aphanomyces astaci*, brought into Europe by the somewhat resistant Signal Crayfish (*Pacifastacus*



*Aquatic mosses are often forming the depth limit of the aquatic vegetation in nutrient-poor lakes.*

*Camera: Canon G7, housing: Ikelite, lens: Ikelite W-20, aperture: 4.0, shutter speed: 1/100 and ISO: 200.*

leniusculus), which is still used in aquaculture throughout Europe.

Lobelia lakes in Norway and Sweden often present astonishing underwater landscapes which remain hidden to people who prefer swimming in the sea. The bedrock forms a fantastic hardscape of beautiful colours and on the soft sand, isoetids and other rare plants thrive. Decomposing wood is often trapped in the lakes and forms attractive

contrasts to the rocks and the green leaves. But the lakes as ecosystem are threatened by both eutrophication and global warming. Denmark has already lost more than 50% of the lobelia lakes that were present 100 years ago. This is due to extensive farming that results in heavy eutrophication by nitrogen and phosphorus fertilizers that are washed into the groundwater before seeping into the lakes where it results in phytoplankton blooms



*Midnight in Southern Norway in July. The peduncles of Lobelia dortmanna are emerging and the flowers will soon open and be ready for pollination.*

*Camera: Canon 450D, lens: Canon EF 100mm USM, aperture: 3.5, shutter speed: 1/15 and ISO: 100.*

(green water). As for global warming, we still do not know how it will affect the lobelia lakes. So far, we can only speculate that the southern distribution of isoetids will move northwards resulting in total loss of habitats that are at present protected by the most extensive EU habitat regulations.

Plants from lobelia lakes are not widespread in the aquarium hobby. So far, only one species, *Littorella uniflora*, has found its way into our tanks. It was originally introduced by Tropica Aquarium Plants in Denmark but they discontinued the production a few years ago. Now, *Littorella uniflora* is only produced by the Italian aquatic plant nursery, ANUBIAS. *Littorella uniflora* can be an attractive plant.

In nature, it is often found with dark red leaves but it seems that the red colour is caused by a combination of low temperature and low nitrogen availability; conditions that are hard to mimic in a tropical planted aquarium. In addition, various attempts with *Elatine hexandra* and the extremely rare *Elatine hydropiper* have been made but they do not really thrive well in water above 20 °C. Hence, lobelia lakes probably do not present an overlooked source of plants for tropical planted aquaria so we need other allies to maintain the political pressure that is needed in order to reverse the current trend where lobelia lakes are lost at an alarming rate all over the northern hemisphere.

**Ole Pedersen**

*Associate Professor at the Freshwater Biological Laboratory, University of Copenhagen, Denmark.*



*Photo by Jyllandsposten*

# Walea

by Angel Cegarra

Walea is a diving protected area established in year 2003 by private owners and Indonesia Government; it consists in an extension of 200 square Kms of coral reef marine life under continuously surveillance by local authorities in order to avoid fishing with bombs and cyanide, which unfortunately happens still all over Asia. The place is located in the Togian Islands into the Tomini Gulf at Northeast of Sulawesi.

The first stage of the trip is the flight from Singapore to Manado. Manado airport is very small compared to Singapore one, the main point of stopover in diving trips to Indonesia. European travelers need a visa to enter the Country and it can be managed in advance before the trip by the Indonesia Embassy at the Country of origin. It is possible also to get it directly in Manado at arrival, but I prefer to have it prepared in advance in order to avoid delays and paper work. They are sometimes strict with the goods brought in the luggage so is better not to carry many electronic devices or they may ask you for their value (no problem with underwater camera equipment anyway). Not too

much choice into the airport for a good place to have breakfast except for an executive VIP room where you can enter for only 3 euro price, a breakfast buffet is available with some drinks and free internet, nice place to stop on the way back while waiting for your connection flight to Singapore

To travel from Manado you should take a Merpati's charter flight booked exclusively for Walea clients, Merpati is a local small airways company. The plane leaves Manado and 1 and ½ hour later lands at Luwuk. It is such a pretty adventure and there is a very nice view of the sea and the islands from the sky. The plain is not prepared in a luxury style but it is enough for its purpose, maybe a bit noisy since the propellers are very close to the passenger's

*Gorgonians and sea fans  
Canon EOS 400D, Sea&Sea DX-350D housing, Tokina 10-17 mm at 10 mm.  
Two Sea&Sea YS-250 on manual mode. Exposure: 1/160 sec at f/8. ISO 200*





© Angel Cegarra

***On the way to Tanjung Keramat  
Canon EOS 400D, Tokina 10-17 mm at 10 mm.  
Exposure: 1/200 sec at f/10. ISO 200***



© Angel Cegarra

***Sea fan on top of reef pinnacle  
Canon EOS 400D, Sea&Sea DX-350D housing,  
Tokina 10-17 mm at 10 mm. Two Sea&Sea YS-250 on  
manual mode. Exposure: 1/250 sec at f/8. ISO 200***



© Angel Cegarra

***Nudibranch on a reef rock  
Canon EOS 400D, Sea&Sea DX-350D housing,  
Canon EF100 mm f/2.8 USM. Two Sea&Sea YS-250  
on manual mode. Exposure: 1/250 sec at f/20. ISO  
200***

windows. A very good idea by the Flight Company would be to provide the passengers with ears protectors. It is definitely very practical to wear headphones with some nice music during the flight.

Once at Luwuk, a private car with luggage porters will be waiting for you .The car is similar to the typical airport shuttle you can find at any of occidental airport and will take you on a road trip between some small villages and a nice forest until reaching Pagimana Harbour, in the opposite side of the Island, then a 400 CV speed boat will transfer you through the bay until reaching the resort, at Waleabahi Island.

The total time for this entire trip (Manado-Walea) takes approximately 5 hours.

We arrived to the resort at late night and were not able to recognize anything from ours reminds from the pictures saw in the Walea webpage. Were so tired that decided to have dinner and go to bed

afterwards, supposed to discover the paradise the day after.

The resort has a number of Cottages around a living area with a restaurant and recreational area. There is also a sunset bar close to the jetty and a separated relax/spa area when you can have a nice massage and rest in the poll after the diving “hard work”. Next to the restaurant are located the diving infrastructures with all the equipment to rent, air compressors, freshwater raising area, etc. All your equipment is looked after by the diving guides so it is not necessary to carry around with diving gear.

Marine life has an incredible diversity as you can see so many fishes and invertebrates. There is a dominance of stony corals although soft corals, sea fans and sponges are frequent in all dives. Is nice to have encounters with several species of clown fishes in their host sea anemones and also a great variety of macro life like nudibranchs, small crabs and

shrimps and of course the new species of seahorse discovered here some years ago: hippocampus waleanus, smaller than a human finger nail and impossible to see elsewhere in the world.

We saw some small sharks and even baby sharks protected underneath some coral branches, crinoids are always associated with big sponges and they are really a spectacle in night dives, also huge Spanish dancers, lion fishes, puffers, sea cucumbers, octopuses and squids are frequent in night dives. Corals are dominated by acroporas and porites species and thousands or triggerfishes are easy dive mates.

The resort staff and dive guides are very friendly and they try hard to search for marine life for you. The philosophy in this place is to mix the dive adventure with enjoyment of calm of the warm water around the jetty and the possibility of snorkeling facilities and relax activities. So if you



© Angel Cegarra

*Sea fan and small soft coral*

*Canon EOS 400D, Sea&Sea DX-350D housing, Tokina 10-17 mm at 10 mm. Two Sea&Sea YS-250 on manual mode. Exposure: 1/160 sec at f/14. ISO 200*

think a life aboard is a bit stressful or too much “sport oriented” this is the place for you. In my opinion I would prefer Walea in the months of the year with less humidity in the air since temperatures are high and the wind is quiet.

The daily plan includes two dives from the boat in the morning, one evening dive from the jetty and an optional night/twilight dive from the jetty or by boat. Two tanks are brought aboard for the first two dives so guides take care of swap your

empty tank with a new fresh charged tank, after the first dive. There is a typical surface interval of one our before the second dive. The guides are very friendly and take care of all your equipment back in the resort in order to raise everything in fresh water and leave for drying in the diving center. No nitrox is available in Walea.

There is an interesting land activity which consists in an excursion walking from the cottages to the end corner of the island, which name is Tanjung Keramat. During the walk



© Angel Cegarra

*Schools of fishes under the jetty*

*Canon EOS 400D, Sea&Sea DX-350D housing, Tokina 10-17 mm at 10 mm. Two Sea&Sea YS-250 on manual mode. Exposure: 1/250 sec at f/3.5. ISO 200*

you can see exotic animals as big and small crabs living in their sand refuges, medium size lizards, exotics birds and a lot of dense vegetation, mainly trees and palms covering the sky above you. Is it possible to watch local fishermen in their small canoes working under the sun to capture their food. In fact we used to see local persons sailing to the resort early in the morning with some fresh fishing captures. Staff was buying these fishes in order to prepare for cooking, so we could have them later at lunch or

dinner.

Just at the end of the corner there is a small fishermen village where you can find some houses made of palm tree branches and strips of wood available in the small jungle surrounding the area. When the vegetation finishes, a very nice lagoon appears just in front of a very small white sand beach. It is a fantastic corner to swim and enjoy the sun and the calm waters. We went for snorkeling in this area and could feel medium force water current because



*Anemone shrimp*

*Canon EOS 400D, Sea&Sea DX-350D housing, Canon EF100 mm f/2.8 USM. Two Sea&Sea YS-250 on manual mode. Exposure: 1/125 sec at f/16. ISO 200 (Top right) Pink anemone fish Shot as above. Exposure 1/125 sec at f/11*

of the edge position of the island, nothing to be worried about anyway. After the swimming experience, we came back to the beach and saw one of the resorts fishing boats coming “to our rescue” with drinks and food. They brought everything needed for a fantastic lunch under the shadow of a big tree, beers included. It was a magic moment for all of us, enjoying so much our private beach and small restaurant just on the sand of this beautiful place.

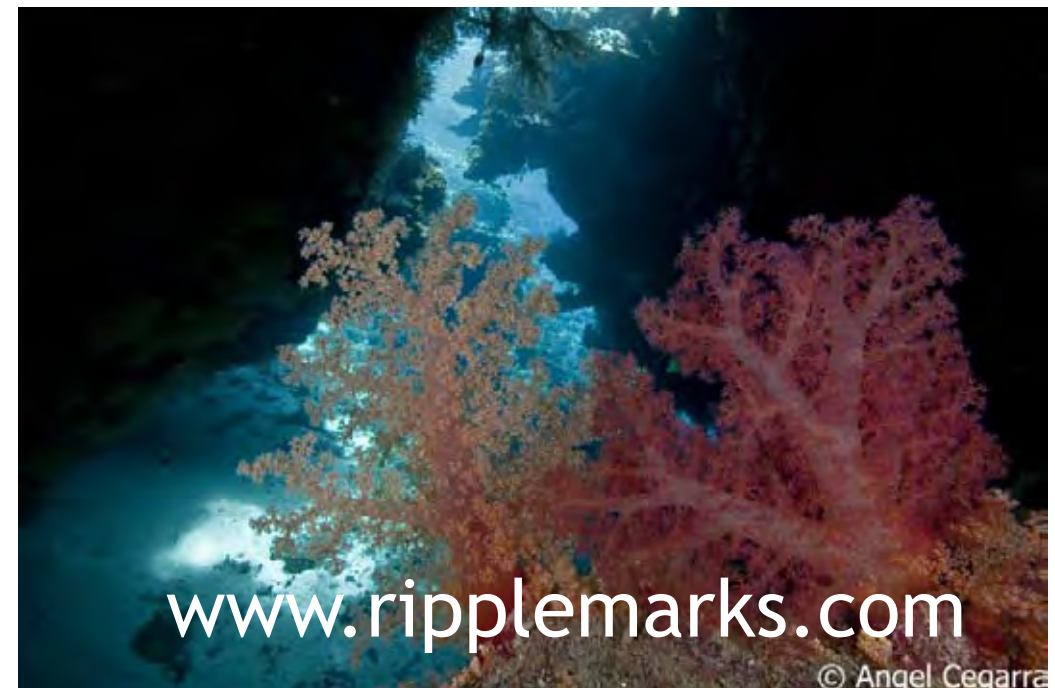
Post-diving activities includes the visits to the relaxing spa and massage area. This zone is located in a different reef house, separated only 50 meters from the main restaurant and diving center. There is a complete menu of available type of massages to chose and professional staff of both sexes in order to assist you. It is a very quiet place and a way to have a break from diving and snorkeling in case you feel tired or just for relax. Next to the massage area you can find



So this is the philosophy of Walea. If you feel identified with it, this is the place to spend your next diving holidays.

**Angel Cegarra**  
[www.ripplemarks.com](http://www.ripplemarks.com)

the spa pool with marine water which makes very tiny bubbles. It is very nice to stay for some time into the spa watching the sunset after a calm massage and feeling the water current and bubbles that embraces all you body.



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

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

# The Sea of the Dragons

By Erik Henchoz

Their name evokes medieval stories of dragons and knights, legends from olden times and fabled adventures. Indeed, the Seadragons are small and defenseless creatures that exhibit unusual and fascinating colors and shapes.

The Seadragons are close relatives to the more common Seahorses and Pipefishes, live in shallow waters and belong to the family Syngnathidae. They are divided in two species: the Leafy Seadragon (*Phycodurus eques*), which lives in the temperate waters of the southern coasts of Australia, and the Weedy Seadragon, (*Phyllopteryx taeniolatus*) which lives and reproduces along the coast of Tasmania

The Weedy Seadragon and the Leafy Seadragon have a similar biology and lifestyle, but they are very different with regards to form and color. The Leafy Seadragon has long and branching leaf shaped protrusions and depending on the individual, the habitat, the diet and the stress level, their colors may change between yellow, green and brown. The body profile of the Leafy Seadragon is really astonishing: it swims using

the drive created by the pectoral fins, located close to the neck, and the dorsal fin, which is located on the tail. The Leafy Dragon moves in a horizontal position, and it doesn't have a prehensile tail; these aspects differentiate it from the Seahorse.

It is a shy and reserved animal, and it hides within thick vegetation on the sea bottom where it is rich in algae and aquatic plants. This is a fascinating ecosystem where sea life from both temperate and tropical ocean climates mix, creating a strange world with surprising animals.

It is a master of mimicry, with a body covered by long thorns and

***Top - Leafy sea dragon***

***Camera: Nikon D300 Housing:  
MDX-D300 Sea&SeaFlash: 2 YS-  
110 Lens: 60 mm AF-Micro Nikkor  
F/2.8 DF-STOP: F 13 Shutter speed:  
1/125 ISO: 200 Focus: autofocus image***

***Right - Carey Harmer filming a Leafy sea dragon***

***Camera: Nikon D300 Housing:  
MDX-D300 Sea&SeaFlash: 2 YS-  
110 Lens: Nikon AF DX 10,5 f/2,8 G  
IF-ED F-STOP: F 8 Shutter speed:  
1/125 ISO: 200 Focus: autofocus image***



osseous plates, and it swims with extreme elegance within luxuriant marine prairies looking for food. It doesn't chew its food, but it sucks it up using a long nose which terminates with a small toothless mouth. Its diet consists of minuscule crustaceans and microscopic plankton, which it is able to hunt undisturbed due to its unique ability for camouflage.

The Weedy Seadragon, also called the common Seadragon, lives in the same waters of the Leafy Seadragon, but it is also possible to find it in colder waters. For example, it is easy to encounter the Weedy Seadragon along the Tasmanian coast, while it is swimming in luxuriant ocean prairies and Kelp forests.

The colors of the Weedy Seadragon are very different to the ones of the Leafy Seadragon and are surprising: brown and dark green for the individuals that live in shallow waters and purple-red and orange for those that live deeper. While the Leafy Seadragon and Weedy Seadragon are similar, the primary difference of the Weedy Seadragon is the lack of prominent protrusions: it has smoother appendages, which have the same color as the body. Like the Leafy Seadragon, it lives in shallow waters and it most comfortable between the big and thick leaves of Kelp and it prefers sandy and debris covered sea bottoms, as well as algae fields.



**Leafy sea dragon**  
**Camera: Nikon D300Housing:**  
**MDX-D300 Sea&SeaFlash: 2 YS-**  
**110Lens: 60 mm AF-Micro Nikkor**  
**F/2.8 DF-STOP: F 20Shutter speed:**  
**1/125ISO: 200Focus: autofocusimage**

### **The quest for Tasmania's Weedy Seadragon**

Because Seadragons are rare, shy and adept at camouflage, it is very difficult to find, observe and photograph them.

After a long trip, with countless hours on a plane, we found ourselves immersed in a nearly surreal



**Ketty swimming with a Leafy sea dragon. Camera: Nikon D300Housing:**  
**MDX-D300 Sea&SeaFlash: 2 YS-110Lens: 20 mm AF Nikkor F/2.8 DF-STOP: F**  
**13Shutter speed: 1/125ISO: 400Focus: autofocusimage**

atmosphere. We are in Tasmania, more than sixteen thousand kilometers away from home. It is already evening, and there was just enough time to arrive at the Eaglehawk Diving Center, after driving through breathtaking landscapes, and fall asleep exhausted.

Soon it is morning, we are still jet lagged, but Mick and Karen are waiting for us at the Diving Center; in few minutes we will be ready to search for the dragons.

The two managers of the diving center are experts on this subject.

A kind woman welcomes us with a smile, while her husband Mick peers at us from a distance. Karen is an expert Marine Biologist and Mick, who has a strong Australian accent, is a real Irish sailor born in Tasmania.

The adventurous trip to the small dock of Eaglehawk Neck was made using an old yellow off-road vehicle and a cart bulging with diving equipment.

The navigation was also an adventure: the wind and the navigation in the blue water make me

understand why Mark is wearing special boots and a waxed sailor jacket. He is an expert of this stormy sea and he will be our captain and diving guide for the rest of the day.

After twenty minutes of the rough sea, we arrive at our destination completely soaked. The landscape is phenomenal: a small bay protected from the wind and waves of the Tasmanian Sea. The colors of the rocks are spectacular, the typical orange lichen that colonizes them makes them seem magical and fascinating. The water is cold, the Kelp abundant and a short distance away from us a sea lion wanders undisturbed.

A few meters below the surface of the water we discover a completely new marine habitat: white sand area alternate with large expanses of algae. In these waters the Kelp grow very fast and its leaves cover most of the sea floor. It is here, at a depth of a few meters, that we will try to take pictures of the Sea Dragon.

Incredibly, after a few minutes our dream comes true; Mick takes us underwater, and with him we see two beautiful Weedy Seadragon specimens. Two adult male and female seadragons of about thirty centimeters in length approach us at a shallow depth.

It is an exciting encounter, as the male is incubating eggs. The eggs, swollen and almost ready to hatch, are attached to two special areas of the tail where special cavities contain and oxygenate them.

As with seahorses, the female produces the eggs and subsequently gives them to the male. In the case of the seadragons the eggs are literally attached to the tail of the male mate, who will lovingly attend to them. For the next six weeks, he will be the one who will care for them, hiding in

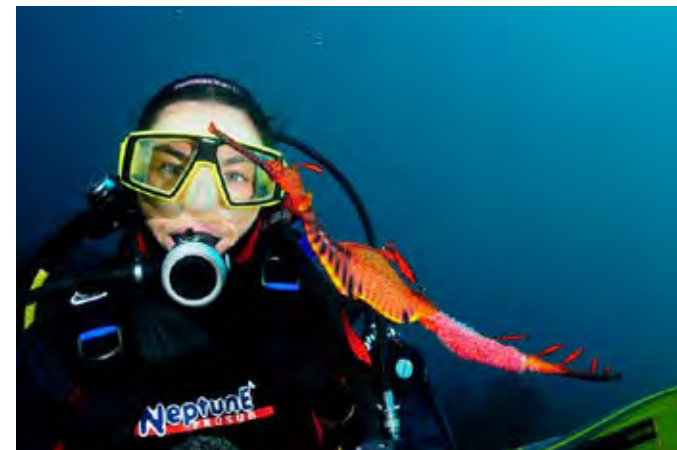


*Weedy sea dragon: a male with eggs. Camera: Nikon D300Housing: MDX-D300 Sea&SeaFlash: 2 YS-110Lens: 20 mm AF Nikkor F/2.8 DF-STOP: F 10Shutter speed: 1/125ISO: 200Focus: autofocusimage*

the Kelp, waiting for the fateful moment when the eggs will hatch. During the last days of incubation, the eggs will perceptibly change their color and they will become red-purple. Only now will the male will inflate his tale, helping the eggs hatch and release give birth to the young. A unique moment, the young dragons are completely developed and ready to start the struggle for survival, as only a small percentage of the newborns will reach the adulthood.

### **The Leafy Seadragon from the Peninsula of Yorke**

Kilometers and kilometers of corn follow each other endlessly, and everywhere there are animals of every type: from parrots to sheep, from kangaroos to reptiles typical of the Australian continent. We are now thousands of kilometers away from Tasmania and the wonderful images of the Weedy



*Ketty diving with a Weedy sea dragon. Camera: Nikon D300Housing: MDX-D300 Sea&SeaFlash: 2 YS-110Lens: 60 mm AF-Micro Nikkor F/2.8 DF-STOP: F 22Shutter speed: 1/100ISO: 200Focus: autofocusimage*

Seadragon taking care of his eggs is still in our mind, while we are travelling on the endless and straight road that leads to Edithburgh. The Peninsula of Yorke, approximately two hundred and fifty miles from Adelaide, will surprise us. There we will admire and photograph of one of the most beautiful animals of this area: the Leafy Seadragon.

Edithburgh is a small and secluded town on the sea, located on the southern tip of the peninsula. Carey Hamer, an Australian diving instructor and video maker, will be our guide for this new adventure. He's a genuine expert of the Leafy Seadragon who can boast of celebrated achievements in his work with documentary and video footage. We dive below some docks, structures that have been built for cargo ships and are also used by local fishermen and divers.

These are the areas where it is most likely to encounter these shy and harmless animals: a



*The coast near Edithburgh - Yorke peninsula - South Australia*  
*Camera: Nikon D300*  
*Lens: Nikon AF DX 10,5 f/2,8 G IF-ED F-STOP: F 11*  
*Shutter speed: 1/500*  
*ISO: 200*  
*Focus: autofocus*  
*image*

few meters deep immersed in lush life, a rich habitat for aquatic plants and algae. In only a few dives we can finally photograph the Leafy Seadragons.

The first is a young individual not yet a year old, evident by its coloring which is darker than that of adults. Remaining close to one of the wooden pylons of the dock, it observes us and it follows us with its eyes while we are photographing it in its natural habitat. It moves gently, seeming to fly, and its branchy protrusions sway like they were

moved by the wind.

Further ahead, a couple of adult dragons show themselves: approximately thirty five centimeters long, they have the typical yellow-green colors with fantastic ramifications and white decorations on the nose. Graceful and elegant, they move gently due to their small pectoral and dorsal fins. They look at us, they turn, they move down and then they move up, like in an underwater dance. Grace and tenderness: they are extremely photogenic animals who use mimicry

as their only tool for survival. Around us there is a marvellous underwater habitat full of life: only a closer look is needed to discover seahorses, pipe fish, flocks of beautiful Old Wife (*Enoplosus aratus*), huge blue swimmer crabs (*Portunus pelagicus*) and small but potentially dangerous blue ringed octopus (*Hapalochlaena maculosa*)

Thin and fragile animals, the Seadragons can be attacked by an external parasite, the *Creniola laticauda*, able to pierce through their tough armor and then eat the blood and the other body fluids until the victim dies. The greatest danger, however, is man. Urbanization, pollution and the bad habits of wanting dragon specimens in both public and private aquariums have made it so that, year after year, it is always more difficult and rare to find these animals.

Carey takes this issue seriously and we, lovers of nature and of the underwater world, agree with his ideas. The Australian government is doing a lot to protect these friendly inhabitants of the sea, passing laws for their protection and conservation. Unfortunately, the laws are not enough to protect them. The Seadragons are known and admired around the world for their beauty, but few people understand the importance of preserving the habitat where they

live and procreate. Inevitably, they became an endangered species, with their high sensitivity to the slightest pollution and their high mortality rate while they are juveniles. They depend on us for their survival, and our decisions and behavior will determine their future.

For the last time, we admire these beautiful and fascinating creatures, knowing that soon we will return to observe and photograph them. They are unique and endemic to this amazing continent that we call Australia.

**Erik Henchoz**

*Special thanks to Karen Gowlett-Holmes, Mick Baron of Eaglehawk Diving ([www.eaglehawkdive.com.au](http://www.eaglehawkdive.com.au)) and Carey Harmer ([www.leafyseadragontours.com.au](http://www.leafyseadragontours.com.au)) for the support and the diving assistance.*



# Low Lee Reef

By Mark Webster

Mounts Bay and the Penzance area of Cornwall has some excellent diving throughout the area, but one of the most popular sites with local dive clubs is just a mile or so offshore. Low Lee Reef or Low Lee Ledges rises from around 20m to less than 3m on a low water spring and lies on the main shipping approaches to both Penzance and Newlyn harbours. So the reef area is marked with an admiralty buoy which also makes it easy to find if you are a diver! The reef is spread over quite a large area and has a varied topography ranging from areas of gravel and shale to low reef outcrops rising to some substantial wall and ledge sections that top out on shallow reef plateaus. This variety also equates to numerous different habitats for marine life in a relatively small area which of course is the attraction for photographers.

The habitats here also include more than one wreck. The major feature is the wreck of the SS Primrose which was a small 272 ton coaster that struck Low Lee Ledges in poor weather on 23 August, 1906 as she was approaching Newlyn with a cargo of coal. There are also parts of a steel trawler, the Dolphin, in three areas around the reef which had originally run aground and sunk outside the harbour entrance to Mousehole, another small fishing port a mile or so to the west. This wreck was partly salvaged and then cut up before being moved and dumped around the Low Lee reef to reduce the hazard to local shipping. The third wreck here is much older and is thought to be the remains of a Dutch East Indiaman wrecked in the 1700's



*Wreckage from the trawler Dolphin is scattered around the reef and this large section lies right beside the wreck of the SS Primrose. Nikon D300, Subal ND20 housing, 10-17mm FE, Subtronic Mini flash guns, ISO100, f8 1/30.*

*Cuckoo wrasse – Male cuckoo wrasse are perhaps the most colourful fish in UK waters and are very territorial. There are several around the reef and wreck which are very bold, often convinced there is an intruding male when they see their own reflection in the dome. Nikon D300, Subal ND20 housing, 10-17mm FE zoom, Subtronic Mini flash guns, ISO100, f11 1/25.*

*Red dead men's fingers – in addition to the common white species of soft corals there are many colonies of this much more colourful species which make a great wide angle of macro subject. Nikon D300, Subal ND20 housing, 10-17mm FE, Subtronic Mini flash guns, ISO100, f11 1/30.*





*Common lobster – there are several lobster lairs on the wreck but the number of lobsters seen does rise and fall with the fishing activity in the area. Take pictures only! Nikon D300, Subal ND20 housing, 10-17mm FE, Subtronic Mini flash guns, ISO100, f11 1/30.*

*Tompot blenny – Tompots are like clown fish for most photographers, often very bold and irresistible as a subject for almost any lens combination. Nikon D300, Subal ND20 housing, 10-17mm FE zoom and 2X TC, Inon Z240 flash guns, ISO100, f16 1/80.*

*Squid eggs – squid come inshore to lay their eggs in late spring which take three to four weeks to hatch. They produce thousands of miniscule but perfectly formed squid which then join the plankton soup to mature. Nikon D300, Subal ND20 housing, 10-17mm FE, Subtronic Mini flash guns, ISO100, f11 1/30.*

although there is little to see of this now except a couple of iron cannons.

The local dive club in Penzance installed a guided nature trail here some years ago to help visiting divers find their way around the site. This comprises a network of ropes that lead you to the major features of the

site, although the text on the tags is difficult to read now it is still very useful if you are on your first visit. More information on the nature trail can be found on the Penzance dive club website (<http://www.penzancedivers.co.uk/lowleeroute.htm> ). I normally start my dive on the

wreck of the Primrose which is often buoyed on the bow during the summer months. The depth here is around 16-18m dependant on the tide so is close to the maximum for your dive profile and the nature trail ropes are easily found from here. The wreck itself has begun to collapse a little more in the past couple of years but there are still many recognisable features and substantial pieces of wreckage. The wreck is home to a resident school of bib or pouting, who are both

inquisitive and co-operative if you are patient, and several cuckoo wrasse with one dominant male amongst them who will keep coming in to chase off his own reflection in your dome port. There are all sorts of holes and tubes in the wreckage which are home to tom pot blennies and at least one resident conger eel. A few yards from the main wreck lies a portion of the trawler which is also worth investigating as it attracts wrasse, topknots, cuttlefish and the occasional



***Conger eel – There are resident conger eels on the wreck and the reef at Low Lee. They can look threatening but are generally gentle and often shy. Nikon D100, Light and Motion Titan housing, 12-24mm zoom, Subtronic Mini flash guns, ISO200, f11 1/60.***

angler fish. In fact the gravel seabed around the wreck is a favourite resting spot for cuttle fish who will bury themselves almost completely and convince themselves they cannot be seen until you get very close. Octopus are also often seen on the wreck (not by me though!) and squid also leave their egg pouches here each spring, so it can be very productive.

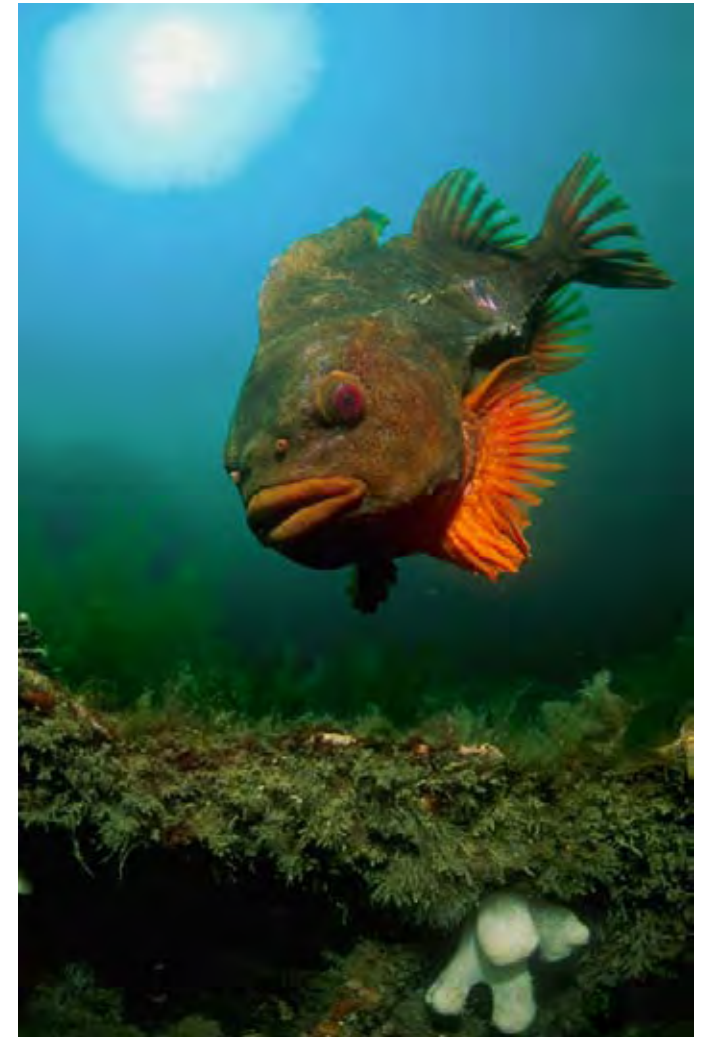
The Primrose wreck also has fond memories for me as the place where I took my first proper images of a lumpsucker. Although I had seen them occasionally over the years it was generally at the end of a dive when I had no film left or the wrong lens fitted. These weird fish are unusual if not rare in Cornish waters but after a cold winter we occasionally find them inshore in early spring when they come in from deep water to spawn and



***Mating spider crabs – There is a mass migration of spider crabs in to shallower water in early summer to mate. Once they have paired off the males are very protective and will threaten even a large photographer. Nikon D300, Subal ND20 housing, 10-17mm FE, Subtronic Mini flash guns, ISO100, f11 1/30.***

the male is left to tend the egg mass. Once you have found a male guarding and tending his eggs you can expect to find the fish on the nest for up to four weeks until the eggs hatch. Local divers had told me that there was lumpsucker resident on the wreck of the Primrose, but nearly two weeks had passed since the last sighting and I feared I might be too late. But my luck was in and I made several dives on one day to record the fish with various lenses. One of the images, taken with a fish eye lens of the lumpsucker defending his eggs against determined wrasse, went on to get placed in several competitions including the Wildlife Photographer of the Year and so I always remember this whenever I dive here, although I have not seen a lumpsucker here since.

Moving off the wreck to the west you will come to the main reef area which has some quite



***Lumpsucker – Lumpsuckers are a rare sight in Cornish waters which are normally too warm for them. But occasionally after a cold winter they do arrive in the shallow coastal waters to breed and the male is left guarding the eggs. Nikon F801, Subal housing, 16mm FE, Subatec S100 flash, Fuji Velvia 50, f8 1/60.***



*Sea hare – Sea hares are abundant in early spring when you may encounter literally hundreds amongst the kelp feeding and mating. Nikon D300, Subal ND20 housing, 105mm micro, Inon Quad flash, ISO100, f16 1/30.*

substantial mini walls which as you rise up toward 10m are mostly free of kelp. On these vertical faces you will find healthy colonies of soft corals (dead men's fingers) both the more common white variety and the red species and occasionally a vivid yellow colour. These make great wide angle and macro compositions and if you are using a macro lens look closely at the white ones as you will occasionally find cowries feeding on them. Amongst the soft corals are beds of hydroids, daisy anemones and jewel anemones where you are likely to find several species of nudibranch feeding in the spring and early summer. The purple flabellina species is quite spectacular and will often be found feeding on the oaten pipe hydroids or purple calcified seaweeds, but due to their small size you will most likely need some additional magnification for a full frame



*Cuttle fish – these cephalopods are commonly seen on the gravely seabed around the wreck and are often very inquisitive if you wait for them to come to you. Nikon D300, Subal ND20 housing, 10-17mm FE, Subtronic Mini flash guns, ISO100, f11 1/30.*

image.

Following the nature trail rope will take you through several more deep gullies to another area of overhanging walls where in addition to the soft corals you will also find small sea fans (gorgonian) which are also worth a much closer and detailed look for a species of nudibranch that lives exclusively on the fan and mimics the polyps and another species of cowrie that feed on the polyps. A branch rope from the main trail will also take you to one of the iron cannon remaining from the Dutch East Indiaman. This area was excavated by a local wreck archaeological group a few years ago but despite some interesting artefacts being found they were unable to positively identify the wreck. You can continue to explore in this area which has many large reef blocks interspersed with patches



*Basking shark – some years bring large numbers of basking sharks when the plankton arrives and it is not unusual to see these huge sharks all the way from Mounts Bay to Lands End. Nikon D200, Subal ND20 housing, 12-24mm zoom, ISO200, f8 1/30.*

of sand and gravel where there is a good chance of encountering angler fish, dog fish and occasionally tope. Most of these blocks top out at around 10-12m so have little in the way of kelp on top, but plenty of soft corals, anemones, sea urchins and sea cucumbers. There are goldsinney, ballan, corkwing and more cuckoo wrasse to be found here along with cruising Pollack and the occasional school of bass and sand eels.

As your bottom time depletes you can then retrace your fin strokes back towards the wreck and the main reef to begin to explore the shallower elevations. Moving up the shear wall sections you will come to numerous small plateaus and gullies cut into the reef which divides into two main peaks as it rises towards the surface. The kelp gets thicker, but it is worth making a slow ascent and exploring



*John Dory – These spectacular looking fish are quite common in late summer but difficult to spot amongst the sea weeds due to their excellent camouflage. Nikon D200, Subal ND20 housing, 18-35mm zoom, Subtronic Mini flash guns, ISO100, f11 1/60.*

your dome.

In amongst the kelp stypes there several different species of sponge and you will continue to see the colonies of daisy and jewel anemones. Take your time exploring here and you should encounter perfectly camouflaged scorpion fish, pipefish, topknots and in early spring sea lemon nudibranchs feeding on the sponges and laying their attractive rosettes of eggs. The fronds of the kelp are often covered with sea mats (bryozoans) which in the late spring and summer time attract *Polycera quadrilineata* and *Polycera faeroensis* nudibranchs to feed and mate leaving their neat coils of eggs. You will also find the pink species of *Coryphella gracilis* nudibranch on the kelp as well and perhaps the occasional cling fish all of which will keep you busy with a macro lens for a whole dive if you want to stay shallow. The anemones, sponges and ascidians all provide opportunities for macro or abstract shots and you might also encounter

carefully between the stypes. As you approach the kelp line look out for John Dory's in the late summer months. These masters of camouflage are occasionally seen on the wreck but they much prefer the cover provided by the weed on the reef for hunting smaller fish species. In spring time you will also find numerous spider crabs on the edge of the kelp line looking for a mate and often locked in an embrace with a member of the opposite gender. The males will become quite defensive if you get close, but I am not sure if this is a threat display to the photographer or to the reflection of another crab in

spider crabs picking their way through the stypes looking for something to feed on.

As you finish your dive and emerge on to the top of the kelp canopy to make a safety stop it is worth watching the open water particularly if there is a little current running. When there is plankton about there are often jelly fish riding the current and feeding and in late spring and early summer there is always the chance of basking sharks. In fact it was within sight of Low Lee that I was involved in a rescue of a basking shark from a gill net a few years ago.

So this site is good for a whole range of subjects, lenses

and techniques and is the perfect combination of depths for repetitive diving if you want to return to a particular subject. Being just a short run from Penzance harbour it is also close to good facilities and makes a good shuttle dive location if you are visiting with a club. There are many excellent sites in this area of Mounts Bay but Low Lee endures as one of my favourites.

**Mark Webster**  
[www.photec.co.uk](http://www.photec.co.uk)

**UW Photo Workshops with Mark Webster in 2011**  
**Red Sea - 7-14 October**  
**Sipadan, Mabul & Kapalai - 3-10 Dec**

For details see:  
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## THE UNDERWATER PHOTO & VIDEO PORTAL



# Book Review

## Underwater Photography for Compact Camera Users

by Maria Munn  
by Dan Bolt

There is no doubting that since taking her first camera snorkelling in 2001, Maria Munn has developed a deep (no pun intended) understanding of underwater photography and has been able to combine those skills with her unbridled passion for the marine world to produce some spectacular images.

“Underwater Photography for Compact Camera Users” is Maria’s first, self published, book and as the title suggests is clearly aimed at divers and snorkelers choosing to shoot with compact digital cameras. Primarily aimed at beginners/intermediate photographers, there is still plenty of material in the pages to offer more advanced shooters, and even dSLR users, one or two interesting tips; good composition, light control and the basics of photography are universal across the plethora of cameras on the market today.

As Maria’s photographic career is testament to, using a compact camera is no hurdle to producing eye-catching photos, winning competitions and even getting your work published.

This book is based on her experiences of growing her own skills with a camera, and is logically laid out and takes the reader from selecting the right camera/housing combination, to adding accessories such as wide-angle lenses and external strobes, all the way through to taking split-level shots and the use of colour-correction filters.

What is a nice touch, and very helpful to understanding the fundamentals of photography, is that most of the images featured in the book are accompanied by information about the camera settings and add-on accessories used to attain the particular effect being illustrated. Many further examples are included which clearly shows the effect of changing just one setting (like shutter speed or aperture) will have while shooting the same subject.

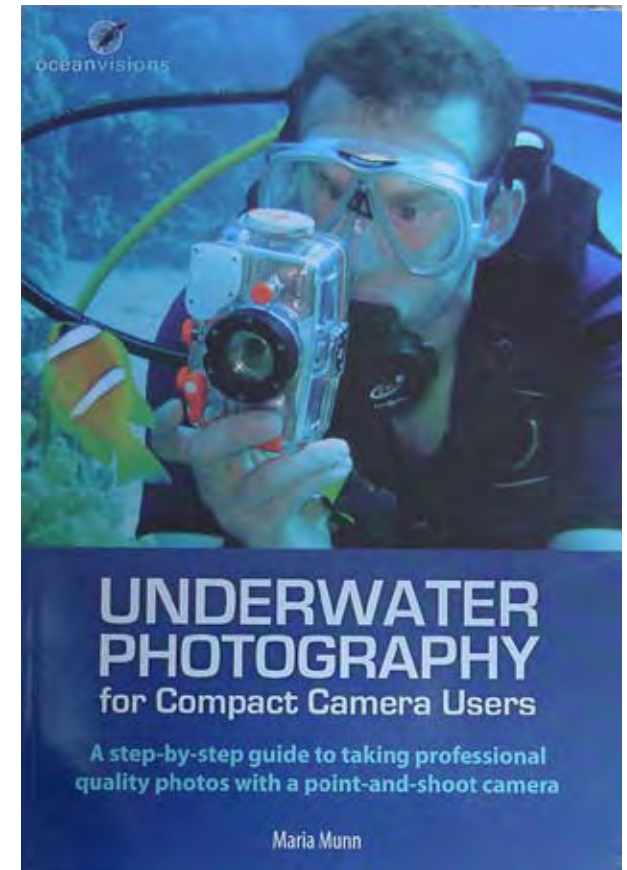
The 170+ pages are adorned with some of Maria’s own beautiful photographs from around the world. Many from popular diving spots like the Red Sea and Lembeh, with others from harder to get to destinations like The Sea of Cortez and Swanage Pier (UK!). This helps to strengthen the message that having mastered your compact camera, those skills will help you in a wide variety of conditions where-ever you choose to get wet. It was great to see the inclusion of a number of lovely images taken by

divers who had completed one of Maria’s photography courses which were accompanied by enthusiastic descriptions from the photographers themselves.

By far the largest chapter is that given over to “Composing A Great Underwater Photograph” and I found myself lingering on these pages more than any other. Here a good number of photographic styles like close-focus wide-angle, abstracts and fish portraits are explained in full with suggestions for both accessories and in-camera settings. Each style is, again, accompanied by sample photos to illustrate what can be achieved by applying the correct technique.

As if to prove how brave she really is, Maria has included a number of her own images that did not come out exactly as planned as an aid to the learning process. This is fabulous because it makes those of us who still manage to produce some stunningly rubbish shots feel a whole lot better knowing that we’re not alone - thank you Maria!

All in all this is a great beginner to intermediate u/w photography manual, and will certainly help you get the most out of your compact camera, especially for those heading



out to warm, clear-water holiday diving destinations.

The book is available from Maria’s online store for £17.95 plus p&p or as an EBook for £9.95.

**Dan Bolt**  
[www.underwaterpics.co.uk](http://www.underwaterpics.co.uk)

**Maria Munn**  
[www.oceangifts.co.uk](http://www.oceangifts.co.uk)

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

# For Sale



## Canon EOS20D camera and Aquatica digital housing with 8" dome and macro port

For sale is the housing, 8" dome port w/shade, macro port, and camera. All ports come with neoprene covers. Both ports have some small scratches on the outside of the acrylic. I will include a free sync cord with each port.

The housing has never flooded and comes with its instruction manual and I will also provide tips & setup advice (if wanted).

Prices are as follows:

Full set (includes camera): 1550EUR

Full set (without camera): 1450EUR

Housing: 875EUR

8" Dome port w/shade: 400 EUR

Macro port: 350 EUR

Buyer pays shipping from Europe. Will ship worldwide.

Glenn Lawyer. Contact me via email

[dr.g.lawyer@googlemail.com](mailto:dr.g.lawyer@googlemail.com)

or telephone (+352 661 967 244) More photos are available.

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# 37<sup>e</sup> FESTIVAL MONDIAL

# DE L'IMAGE SOUS-MARINE



Tanili LIUBAVTSEVA, 12 ans, Saransk, Russie



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# PALAIS DU PHARO MARSEILLE

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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! UwP is the perfect publication for you to increase your profile in the underwater photography community.

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

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

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

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

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

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

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

## How to submit articles

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

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

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

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

File type - Save your image as a JPG file and set the compression to "Medium" quality. This should result in images no larger than about 120k which can be transmitted quickly. If we want larger sizes we will contact you.

3. Captions - **Each and every image MUST have full photographic details** including camera, housing, lens, lighting, film, aperture, shutter speed and exposure mode. These must also be copied and pasted into the body of the e mail.

# Parting Shot 1

“Always be looking down current!” OK, Jim, I get it. This must have been the fourth time he’s mentioned which way to be looking during our dive briefing. By the time he stopped talking he said it two more times. We were over the Little Bahama Bank and I was ready to get wet. There were now quite a few large slowly swimming animals under the boat. No giant strides here; you do a quiet head first seated entry and proceed to the sand below. It didn’t take long before we were in position with some ten good sized lemon sharks doing their version of pacing around us. I, of course, immediately got distracted and focused in on a pair of photogenic lemons. I felt completely calm and was enjoying the warm water when suddenly I was being shaken like a tambourine. At the same time I heard through a cascade of bubbles JJOOOOEEEE...BLUB BLUB...WAH WAH...LOOOOK and there was Jim Abernethy about six inches from my face yelling at me while twisting me around to see a gigantic head less than two feet away staring at me. It was Emma, the “playful” 14 foot female tiger shark who delights sneaking up on the clueless newbie. I hadn’t even been in the water ten minutes and I had

already forgotten – you guessed it – “Always be looking down current!”

I for one never bought into the ravenous eating machine label even after seeing Jaws, I also never really connected to sharks either. Over my underwater career I’ve seen quite a few but always from some kind of distance both figuratively and at times physically. The week I spent in the company of someone who knows these animals from over 30 years of diving with them helped me reach a new awareness. Day after day I could get into a rhythm with whatever sharks came around. It didn’t take long to see patterns emerge. Some liked to come in close while others kept their distance. Some paced around the reef taking the same path every time and some never repeated the same track twice. You could “feel” some of the bolder animals as they swam by, their dark eyes seeing, trying to understand what the noisy, clumsy, vertical beast was in their domain. Clearly they have more to fear from us than the other way around. Half the sharks we saw had fishing lines, lures and one even had bullet holes in them. It’s a sad state of affairs.

Despite my inauspicious beginning with the Little Bahama



*Nikon d700, Nikon 17-35mm WA @ 35mm, Aquatica housing w/ 9.5 inch dome, 1/160 sec, f16, ISO 800, Two Ikelite DS-125 strobes @ half power w/ diffusers.*

Bank sharks, I quickly got the hang of it. I made 23 more dives swimming with tigers, lemons, nurse, black tip, grey, and hammerheads. At no time did I feel threatened or see any aggressive behavior toward any dive members what so ever. My experience with Emma felt more like an alien life form giving me the heads up rather than sizing me up for food. The best way to put it was said by Henry Beston long ago: “They are not brethren, they are not underlings; they are other nations, caught with

ourselves in the net of life and time, fellow prisoners of the splendour and travail of the earth.” Logically to be in their world we need rules and procedures, including the celebrated phrase “Always be looking down current!” Actually, I thought, not such bad advice once I got back to my world either.

**Joseph C Dovala**  
[www.jcdovala.com](http://www.jcdovala.com)

## Parting Shot 2

Having been on a number of trips to the Red Sea my wife, Sally, and I decided any future trips there needed to have more of a sense of purpose. With that in mind we headed for Marsa Alam in anticipation of diving with the resident dugong, known locally as Dennis. Failing that there was also the possibility of an encounter with the pod of spinner dolphins at the aptly named (for once) Dolphin Reef.

On the 3rd day of our trip we headed for Marsa Abu Dabab, where Dennis had at one time been a resident and encounters were commonplace. However, the dive guides said it had been quite a while since Dennis had been seen there but there would be plenty of turtles around and possibly a few guitar sharks to keep us amused.

There were dozens, possibly hundreds, of swimmers and snorkelers at the site and I couldn't help thinking that if I were a dugong I'd look for somewhere a bit more peaceful to spend my days. Unsurprisingly, Dennis did not put in an appearance but turtles were there in abundance and I happily took numerous photos of them and their attendant remoras as they went about their business seemingly unconcerned by the human activity.

The trip to Dolphin Reef was equally unproductive. We could spot some activity in the lagoon but the dolphins didn't stray from the security of that protected environment.

We had set out on our holiday more in hope than expectation of diving with dugongs and dolphins but hope had just about been replaced by resignation. Our penultimate day of diving was at Marsa Mubarak which promised more turtles but was not known for dugong encounters. Sally and I were last back to the boat from the first dive only to find that the rest of the divers had headed straight back out across the surface to where a dugong had been spotted but it was too late for us to join in. Over lunch we looked enviously at the video footage one of our fellow divers had obtained and scanned the bay in hope of further sightings. Just before we were about to kit up for our second dive there were some excited shouts on board and much finger pointing towards a grey blob in the distance. The dugong was now heading back in our direction again.

We quickly put on our gear and snorkelled out towards its last seen position. Within a few minutes we saw the magnificent beast below us grazing nonchalantly on sea grass in



*Nikon D300, Subal Housing, 2 X Inon Z-240 strobes, Sigma 12-24 lens at 16mm, F10, 1/50th sec, Manual Exposure, ISO 200*

about 12m of water. We descended slowly, making sure not to drop down too close to the dugong and disturb it. I finned carefully forward with my camera and began taking photos. There was only time for half a dozen shots or so before it was in need of air and rose towards the surface.

Back on board I reviewed my photos and the heavily scarred body of the dugong suggested it was indeed the famous Dennis. Our time with

him had been fleeting but it was a great privilege to see such a fantastic creature at very close quarters and to get a few photos to provide a reminder of our encounter. We went home very much satisfied with the trip and, who knows, next time we may get to meet the spinner dolphins.

**Morris Gregory**  
[morris.gregory@virgin.net](mailto:morris.gregory@virgin.net)

# Parting Shot 3

There we were, hanging on the shot-line at five metres, off-gassing after an extraordinary dive on the wreck of the Thistlegorm in the Northern Red Sea. The strong surface surge was pulling us in all directions and I found myself glancing nervously at my SPG as the needle moved ominously into the 'red' while my remaining deco time ticked down painfully slowly.

In the shallows, a school of batfish cruised effortlessly around us as we clung, white-knuckled, onto the line. One batfish in particular was zipping around us at enormous speed, much faster than I'd ever seen a batfish moving before and in the blur of its movement I noticed that it seemed to have longer than average pelvic and tail fins. It was moving with such velocity that I couldn't quite put my finger on why it looked so strange so I decided to snap a couple of shots to freeze its movement before surfacing to the welcome comfort of the boat.

Back on board, it quickly became clear that this was no ordinary fish and what we had discovered may well contribute to redefining Darwinian theory of evolution. The fish's ability to move with such speed

and agility seemed to be down to the abnormal growth of two extending fin protrusions bearing a striking resemblance both in shape and colour to a set of the ever-popular fluorescent yellow Mares Avanti X3 fins. We immediately contacted the Egyptian Marine Research Centre and they have just confirmed this to be a new species of batfish to be named *Platax Batavianus Mares Avanti X3*. They blame GM foods and global warming for this strange aberration.

And that's what really happened....

**Alex Tattersall**  
[www.nauticamuk.com](http://www.nauticamuk.com)

*Nikon D300s, Nauticam NA-D300s housing, Tokina 10-17mm Fisheye at 17mm, 2x INON Z240, F9, 1/320 ISO 320*

**Do you have an interesting shot with a short story behind it?**

**If so e mail us and yours could be the next "Parting shot".**

[peter@uwpmag.com](mailto:peter@uwpmag.com)

