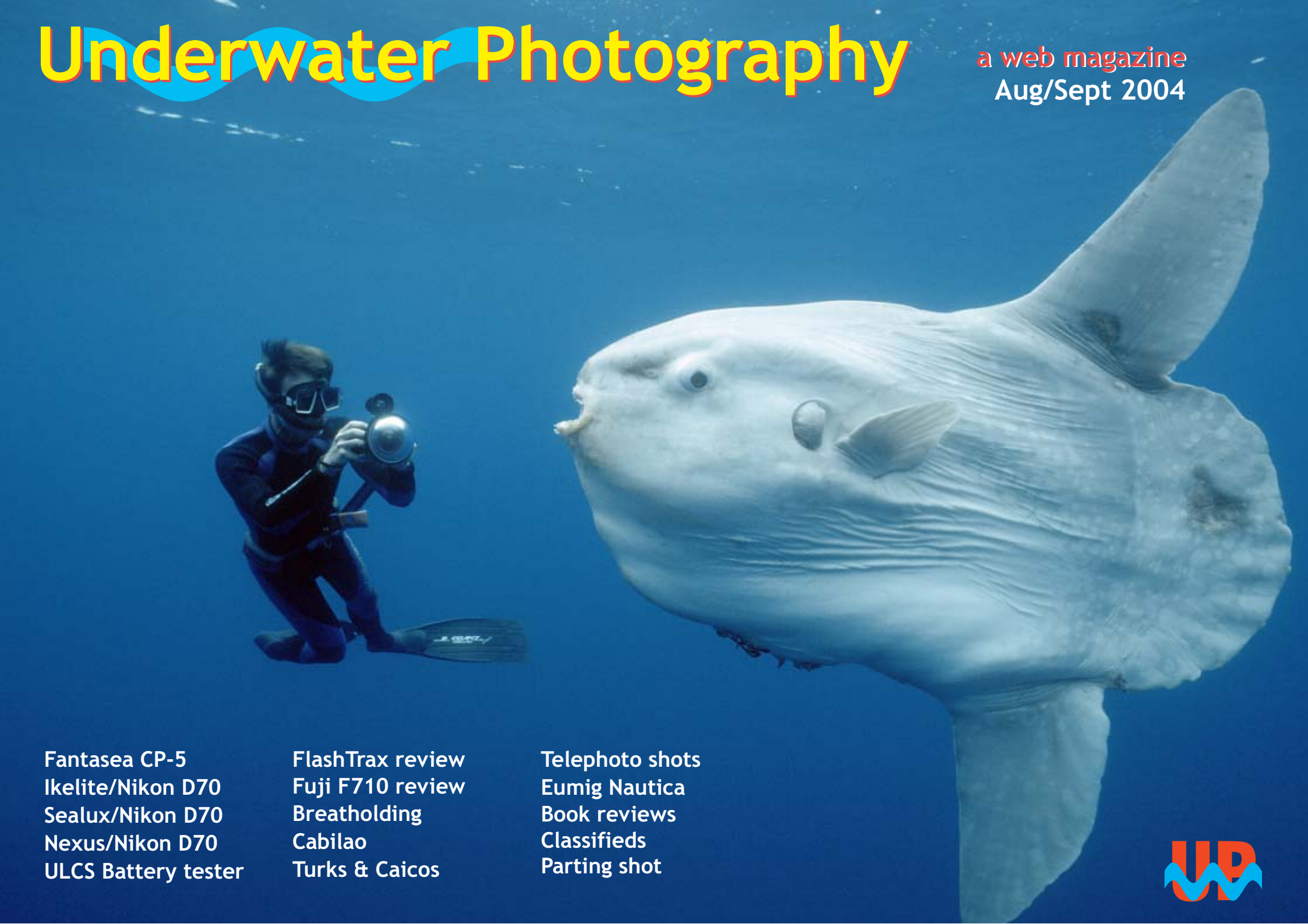
Underwater Photography

a web magazine
Aug/Sept 2004



Digital solutions

INON UK

Four strobes for the digital enthusiast. Choose the features you need including auto exposure and modelling lights.

Two wide angle lenses for shooting large subjects. Optional dome port lets you use your existing lens for superwide angle photography.

Versatile arm system puts precision lighting control at your fingertips. EZ clamps hold strobe securely in high current, yet provide instant adjustment for creativity.

Four macro lenses put extreme close up photography within your capabilities. Available in screw thread or fast mount bayonet fit.

Official INON UK distributors:

Ocean Optics

13 Northumberland Ave, London WC2N 5AQ

Tel 020 7930 8408 Fax 020 7839 6148

E mail optics@oceanoptics.co.uk

www.oceanoptics.co.uk

Contents

Underwater Photography
a web magazine
Aug/Sept 2004
e mail uwp@uwpmag.com

by Will Postlethwaite

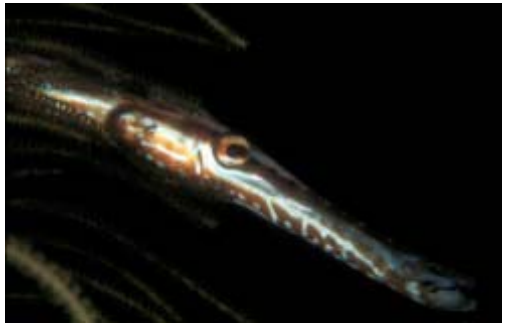
by Tony Matheis

by Peter Rowlands

by Peter Rowlands

by Phillip Colla

by Nonnoy Tan



by Bernardo Sambra

Cover
by
Phillip Colla

by Alexander Mustard

by Steve Warren

by Tony Sutton

Editorial

U/w photo competitions

UwP has made a point of trying to help promote many of the underwater photography competitions which take place annually throughout the year but recent discussions on the internet forums have highlighted the possible copyright problems involved.

Most competition entry forms come with more pages of regulations than most entrants can be bothered to read but a careful scan of these rules can reveal some worrying and often flagrant attitudes towards the entrant's copyright protection.

In truth most well established competitions are respectful of the entrant's copyright and only ask that they be allowed to use the winning entries to promote the current and next competitions. This seems fair enough to me except in the case where a diving magazine organises the competition and saves itself a tidy sum by being able to reproduce the winning images in its publication.

However there are other competitions, one of which we feature in this very issue whose rules state "Use of Photos by the NC Aquariums—All entered photographs will become the property of the North Carolina Aquariums and may be used without further compensation for a variety of purposes including, blah blah blah etc etc". Basically they do what they like with the pictures.

Now I make no excuses for promoting such a competition because firstly it is, without doubt, a worthy cause and secondly the rules are plain and simple and make no bones about what will happen to an entrant's photographs. In short, each entrant must enter with their eyes open and make sure they are fully informed and accept the consequences.

Competitions provide a healthy venue for those who wish to compete and I myself have entered them in the past when I was young, eager and wanted to become known.

Now that I am older, less eager and well known for all the wrong reasons I really don't see why underwater photography should be competitive. In competitions, for every winner there are dozens of bitter losers who lose the abiity to enjoy their own underwater photography by trying to achieve a grading for their work.

So that's why I gave up entering competitions - because I don't see it as a competitive hobby and I couldn't face being beaten by the new kids on the block.

Shark attacks

A recent fatality in Australia involving a surfer and most likely a Great White shark was a tragic event and my sympathies go out to all those affected.

However I have to question the human response to this attack for the authorities announced that they were going to try and find the culprit and shoot it.

Such a response beggars belief from at least two points of view. Firstly Great Whites, as I understand it, are an officially endangered species and so really ought not be shot for doing what comes naturally to them and secondly how will they know which shark did the attack?

Sharks can reputably cover up to 100 miles a day (which is faster than we can do on most of our motorways at weekends). In addition they could swim in any direction in a 180° arc from the shore so by my reckoning the search area at the end of the first day would be well over 15,000 square miles. I think that gives the culprit a pretty good chance of fleeing the bullet.

The father of the victim was quoted as saying that he held no hard feelings towards the shark which, at such a tragic time, was highly commendable. He accepted that his son was in the shark's territory and suffered as a consequence.

We all know the oft-quoted statistic that more people die per year choking on peanuts than are killed by sharks but peanuts aren't, to my knowledge, an endangered species and anyway I always buy smoothe peanut butter.

Larson on the web

I am a huge fan of cartoonist Gary Larson and used to pay for and include one of his marine related cartoons in every issue of the original Underwater Photography magazine from 1987 - 1989.

Imagine my surprise when I asked for a similar request for UwP and received the following reply:

"Unfortunately, Mr. Larson has a blanket policy that does not permit his cartoons to appear in any electronic format".

Well, at the risk of being sued, do you remember the one of the two bears in the wood and one of them has a large ring of target circles on his chest and the other bear says "Bummer of a birthmark, Hal".

It's just not the same, is it?

peter@uwpmag.com

News, Travel & Events

Visions in the Sea

Ocean Optics/INON digital seminar October 23rd 2004, London

Europe's first conference devoted exclusively to digital underwater photography is being held in London in October.

Visions in the Sea is now in its eighth year. Previous conferences have been concerned primarily with using film to take photographs beneath the waves. However, this year, the focus is entirely digital.

The conference is staged by Ocean Optics, the specialist retailer of underwater photographic equipment based in London. Said Optic's Steve Warren: "The content of Visions this year reflects the significant increase in the number of people buying digital outfits so they can take up underwater photography. We are catering for them but also more serious users of top-of-the range digital SLR's."

Speakers range from divers who use modestly priced compact cameras to seasoned and award winning experts who will share their experience and secrets with the audience.

The conference is being held at the Waterloo campus of King's College London in Stamford Street, SE1 9NN, on Saturday, October 23. Speakers include Peter Rowlands, Alex Mustard, Charles Hood, Will Postlethwaite and Dave Lloyd.

Peter Rowlands, digital guru and founder of UwP magazine

Alex Mustard, marine biologst and UwP contributor

Peter Rowlands

Peter is a digital guru whose been working out a lot recently judging by his photo. He has been involved in underwater photography for over 30 years and is a true convert to digital

Alex Mustard

Alex is a marine biologist and one of the UK's most creative and imaginative underwater photographers,. He is also UwP's most prolific contributor and is on the committee of BSoUP.

Charles Hood, Senior Correspondent for Dive magazine and UwP contributor

Charles Hood

Charles is digital photo-journalist whose trademark pictures of sharks, whales and dolphins have been widely published. He is the author of Dive guide to Cornwall and is Senior Correspondent to UK's Dive magazine.

Charles uses digital cameras for all his magazine work and is shortly moving up to a full size chip camera.

Will Postlethwaite, Cornish cool dude and UwP contributor

Will Postlethwaite

Will is a Cornwall based diving instructor who has extensive experience using a variety of digital cameras to take photographs around the UK as well as in much warmer waters like the Red Sea, South Africa, the Maldives and Indonesia.

Photoshop wizard Dave Lloyd is the Art Editor at UK's Dive magazine

Dave Lloyd

Photoshop wizard Dave Lloyd is the Art Editor at UK's Dive magazine and will draw on his wide design experience to demonstrate how underwater images can be improved and modified with this popular programme.

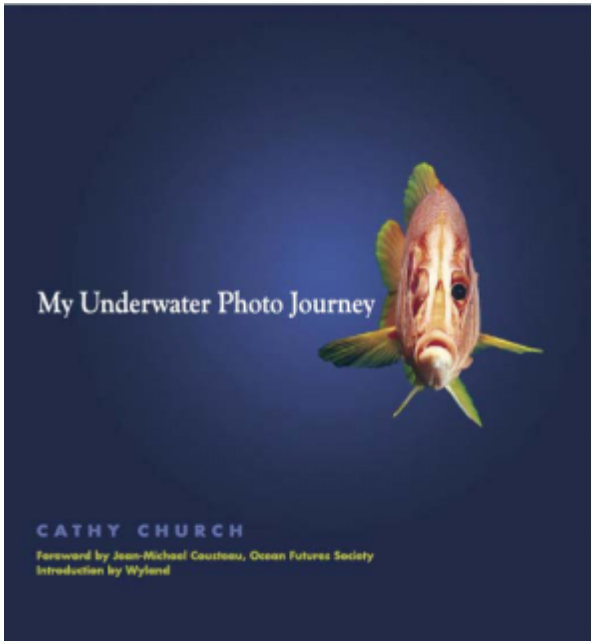
They will examine the digital evolution and its implications for underwater photography, how to evolve techniques to make the best use of digital cameras, how to take high impact photographs, light filtration and the use of colour filters as well as how they use laptops and other digital storage devices to download their pictures while they are on dive trips and expeditions.

Full details of the conference can be obtained from
Ocean Optics,
13 Northumberland Avenue,
London WC2N 5AQ.

Tel 020 7930 8408

email
optics@oceanoptics.co.uk
www.oceanoptics.co.uk

Cathy Church's journey



"My Underwater Photo Journey" is a long over-due portfolio of Cathy Church's favorite images from around the world. It is 11" x 10" hardcover, with short captions describing each of the 135 color and 14 black and white images, as well as a brief code listing the camera equipment used. From Cathy's website, you can download a photo lesson that tells you how she took the photo, along with an additional photo lesson germane to the subject. It is like getting two books for the price of one.

Cathy's underwater photo journey extends from the Caribbean to the south Pacific, from the surface to 150 feet deep. Her work has been admired throughout the world since she started to write articles about how to take pictures underwater in 1967. This delightful book is the first time that she has shown us so many of her lovely photographs; they show her sense of whimsy and art, yet are balanced by her education in marine biology. as a result, we can relish the image and absorb the lesson and yearn for more.

Cathy is one of the few underwater photo artists to pursue fine art black and white limited edition work. She explores the scene in the same ways that Ansel Adams did, and she spends several days fine-tuning the technique for printing each image. her black and white prints show a rare blend of creativity and craftsmanship.

The cost is only US$39.95 plus $8.00 S&H. You may order by mail with US check or credit card, Cathy Church, P.O. Box 479 GT, Grand Cayman, Cayman Islands or by phone (345-949-7415), FAX (345-949-9770) or email cathy@cathychurch.com.

Portugese pdf Underwater Photography magazine

There is a new online pdf magazine about underwater photography published in Portugese.

The 25 page first issue is available now at

http://www.fundodomar.com/rvfs

The content is a good mix of technical information, tips, travel and profiles and the photos are excellent. It's good to see another enthusiast using computers and the world wide web to produce a magazine for Portugese readers.

The editor is Christian Sgarbi
website www.virtualfotosub.org
e-mail: revista@virtualfotosub.org

North Carolina Aquarium Photo Contest

The North Carolina Aquariums are looking for your best shots.

Each year, the state's three public aquariums get together to conduct an Underwater Photography contest. The contest is designed especially for amateur and non-professional photographers and no entry fee is required. Deadline for this year's entries is December 31, 2004. Winners will be announced on or before March 31, 2005. Now in its fourth year, the contest is sponsored by East Carolina Bank.

The aquariums stage the underwater photo contest to highlight the state's rich aquatic resources and to recognize excellence in amateur photography. Employees of the N.C. Aquariums and their immediate families are ineligible. Photos taken by aquarium volunteers while on duty are not eligible.

Cash prizes are awarded in each of three categories: first place $500; second place $200; third place $100; honorable mention $50. Winners at all levels receive certificates. All winning photos will be published in the Summer 2005 edition of "Aquarium News," the magazine of the North Carolina Aquarium Society.

Photographers may submit up to three 35mm slides, prints, or digital images in each of three categories: 1) Underwater Open, which may include wide-angle shots of shipwrecks or other North Carolina underwater scenes; 2) Underwater Animal Close-ups (macro); 3) Aquatic Life in the NC Aquariums, which may feature any animal or group of animals displayed at any of the three North Carolina Aquariums.

Entries by divers must be taken in the waters off North Carolina, or within the state's freshwater systems. The category, "Aquatic Life in the NC Aquariums," allows non-divers to submit photos that capture the beauty and diversity of North Carolina's aquatic life as displayed in exhibits at any of the three N.C. Aquariums.

For complete contest rules and entry application, or to view last year's winning entries, visit www.ncaquariums.com. Mail entries to Photo Contest, North Carolina Aquariums, 417 North Blount Street, Raleigh, NC 27601.

Straightforward Digital Photo Developing

The explosive development of digital photography technology has created an environment of total confusion for most people. To assist the growing numbers of digital camera users, iprintfromhome.com has been launched as a digital photo developing system. This online imaging service enables digital camera users to utilize the Internet to upload, store and order prints and slides from digital images.

The company's founder and owner, George Campos, says "first-time digital camera users don't realize that they can get the same quality photographic prints made from their digital images as they did when they shot traditional 35mm film." Iprintfromhome.com offers a simple user interface that allows customers to effortlessly upload and professionally print images on Kodak paper or 35mm slides.
Iprintfromhome.com is a bridge between the new digital camera technology and what people really want - quality prints and slides. This site offers customers an easy to use interface as well as a quality service in the hopes of capturing the exponential growth of the digital image developing market.
elizabeth@camposgroup.com

Underwater Photography in the Heart of Mountainous Snowdonia, Wales

The National Trust in Snowdonia is offering Underwater Photographers the chance to hone their skills at its newly renovated property Craflwyn Hall. The hall was a Victorian gentlemen's residence which has been sympathetically restored thanks to European Objective One money. From September it will be the base for a variety of special interest and activity holidays.

One of the first of these, is a weekend-long Underwater Photography holiday, to be held from 3rd-5th December. It will take the form of a series of intensive workshops covering: dealing with different types of files, experimenting with colour, making the most of your images for print or projection, using Adobe Photoshop and a variety of other skills specific to underwater photography requirements.

It's not all work and no play though. While they are here, the visitors will be able to make the most of the spectacular surroundings. Craflwyn is situated at the foot of Snowdon and enjoys breathtaking views. The estate has over 200 acres of woodland, parkland and magical, abandoned gardens. Full catering will be provided, including 3 course

dinners every evening using the best of local, Welsh produce.

The workshops will be lead by local photographer Paul Kay FRPS. He has spent over 20 years photographing underwater, and his current project involves shooting through the surface of a range of lakes and rivers across Britain. A selection of his work can be seen at www.marinewildlife.co.uk

The cost of the weekend is £260 which includes all accommodation, food, instruction and VAT. Please phone Jane Richardson on 01766 510120 for more details or log onto our website: www.craflwyn.org

Digital SLR Housings

For

Canon EOS Rebel

Canon EOS 300D

Canon EOS 10D

Canon EOS D60

Nikon D70

Nikon D100

Digital SLR Housing

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

Features:

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

Underwater Housings for 8 megapixels

Canon Powershot Pro 1

Nikon CoolPix 8700
True TTL with
Ikelite Substrobes

Olympus C-8080
True TTL with
Ikelite DS Substrobes

Sony DSC-F828

Ikelite also offers a full line of housings for Non-SLR digital cameras. Beginner, amateur, or pro, simply get an Ikelite housing for your favorite digital camera. Choose from Canon, Nikon, Olympus or Sony, Ikelite makes housings for several camera models from each of these manufacturers.

Ikelite supports their underwater digital housings with a full line of accessories. Choose from trays with single or dual handle and quick release of strobes. The DS50 Substrobe is ideal for cameras with zoom lenses or choose the DS125 for use with wide-angle lenses. Many Nikon and Olympus models offer true TTL lighting exposure, or use our EV-Controller that gives 10 power settings in 1/2 stop increments for complete manual lighting control. Ikelite also offers a choice in versatile arm systems to meet your needs and budget.

New digital cameras are being introduced at a rapid pace. For the latest information on new digital housing models visit our web site.

www.ikelite.com

ikelite
usa

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

New products

Ikelite Olympus C-8080 housing

Ikelite's new housing for the Olympus C-8080 includes **special conversion circuitry** to utilize the outstanding Olympus TTL system without wasting camera battery power and generating the heat of operating the camera built-in strobe which can not be utilized.

This is not a "watching" the camera strobe system. This is real Olympus TTL control with a sync cord, allowing optional Ikelite DS-50 and DS-125 SubStrobes to provide actual **Olympus TTL automatic exposure** dictated by the camera when attached with a single#4103.51 or #4103.52 dual sync cord.

Every camera function is accessible in the housing when underwater. The LCD information window on top of the camera is easy to see as is the LCD monitor.

An optional DS series Ikelite digital SubStrobe improves the photographs and accentuates the underwater colours.

DS-50 and DS-125 digital SubStrobes can also be used with the Manual Controller when connected by sync cord, providing **ten** power settings. Older non-digital Ikelite SubStrobes can be used with a sync cord, operating in their manual mode only.

The comfortable Release Handle and Tray **included** allows easy attaching and removal of SubStrobe mounting arms at the touch of a button.

The **heavy duty** thick wall housing is molded of corrosion free clear polycarbonate and operates safely to 200 feet. Camera and housing complete weighs less than **7** pounds.

Housing measures 7" wide, 10.25" wide with removable tray and handle attached. Front to back measurement is 8" including lens port and knobs. height is 6.5" including push buttons and hardware.

www.ikelite.com

Sealux Nikon D70 housing

Sealux have designed the precision-fit housing CD 70 so that you have total control underwater.

The housing is aluminium, milled from solid, hard-anodised and Teflon coated. One T-piece is provided for flash arms and there are two additional ones on the handles.

There are three windows for monitor viewing, display and selector functions and one Nikon flash connection with fixed contacts.

There are controls for On-Off, shutter release, flash synchronisation, exposure correction, key for display illumination, front and rear setting gear, selector of functions, selector of measuring system, zoom / focusing, aperture, flash capacity correction. AE-L, AF-L can be operated easily together with the shutter release. Functions on the rear side: BKT, ME, monitor, menu, ISO, White Balance, Enter, multifunctional selector, delete key.

You may choose from two variants of viewfinders:

LD-viewer (Long Distance) with a scale of reproduction of 1: 1.6 and GD-viewfinder (Grand Viewer) This gives the same quality as that of a sports viewfinder with a fantastic scale of reproduction of 1: 1.1.

www.sealux.de

UFL-165AD Underwater Fisheye Conversion Lens

Inon Japan announces development of the UFL-165AD Underwater Fisheye Conversion Lens, the latest addition of the AD Mount Lens series, which includes the UWL-105AD Wide Conversion Lens and the UCL-165AD Close-up Lens.

The UFL-165AD is a trim, compact underwater fisheye conversion lens with 165 degree maximum field of view. Focus range from the very front edge of the dome to get as close to the subject as physically possible. Close focus ability and extreme depth of field enable stunning wide angle and 'wide macro' (close focus wide angle) imaging, not previously possible with housed digicams.

Inon AD Bayonet Mount permits quick and easy 'one touch' underwater attachment and removal. Inon AD Mount Base Adapters available for many popular digital camera housings.

The UFL-165AD is Diameter / Length[1] 122mm / 85.5mm (4.8" / 3.4") with an Inon AD Mount and is depth rated to 60m (200 feet).

www.inon.co.jp

www.oceanoptics.co.uk

Nikon - Canon - Fuji.
The Housing With The Reputation To Match Is At Ocean Optics.

Submerging your expensive digital SLR isn't the time to discover you've made a false economy.

Subal housings bring with them more than forty years of design excellence.

Attention to detail, superb handling and the unmatched range of system accessories combine to make Subal the first choice of the discerning underwater photographer who demands durability, reliability, versatility and value for money.

For the digital age, Subal present their housing range for the Nikon D70 and D100, Canon D30, D60, 10D and 1Ds and the Fuji S2 Pro. Subal also offer housings for the Nikon SB80 and 800 and Canon 550EX speedlights for convenient TTL automation.

All backed up by Ocean Optics, sole Uk representatives for Subal since 1991.

Ocean Optics

13 Northumberland Avenue
London WC2N 5AQ

Tel 020 7930 8408
Fax 020 7839 6148

optics@oceanoptics.co.uk

www.oceanoptics.co.uk

Nikon housing WP-CP1 for Coolpix 2200 and 3200

This Waterproof Case is an optional accessory designed exclusively for COOLPIX 2200 and COOLPIX 3200. The case allows you to take pictures safely in the rain, on the beach or even underwater to the depth of 40m.

Nikon housing WP-CP2 for Coolpix 5200 and 4200

This high-quality Waterproof Case is an optional accessory designed exclusively for COOLPIX 5200 and COOLPIX 4200, allows you taking pictures safely in the rain, on the beach or even underwater scuba diving or other water sports to the depth of 40m.

www.oceanoptics.co.uk

Mediasub System photo KF 3

The KF3 housing series was specifically developed for Canon, Nikon, Pentax and Minolta cameras. The various housings offer the beginning underwater photographer or the seasoned pro an array of adjustment options. All important camera controls have been taken into consideration during production, enabling the enthusiast to take full advantage of all the capabilities modern cameras provide. Two universal housings are available for older or less common cameras so that virtually any camera can be used.

In special cases, housings can also be custom made upon request.

Housings are available for:

Canon EOS D10, Canon EOS D30, Canon EOS D60, Canon EOS D300, Olympus E 10, E 20, Fuji Finepix S1, Fuji Pro S2, Nikon D100 and D70.

www.mediasub.com

Fantasea CP-5

The new fantasea CP-5 is designed for the Nikon Coolpix 4200 and 5200 digital cameras and will be available in August 2004.

The 4 camera function control buttons include Zoom/Wide Angle and Review

The CP-5 has a maximum operating depth of 40meters/130 ft.

www.fantasea.com

Hugyfot and Green Force

At age 74, Renee Hugenschmidt, the founder of Hugyfot housings, began his search to locate a company that could maintain his efforts in producing state of the art camera housings. He wanted to continue giving divers the ability to preserve their discoveries through beautiful

pictures.

In January, 2004 Renee announced that Green Force would be the company to carry on his legacy. With Green Force's experience in marketing needs and demands, Hugyfot could soon become the choice of divers who want the ability to take high quality pictures easily.

In a positive first step, Hugyfot has joined Leica. Hugyfot manufactures the housing for the LEICA DIGILUX 2 camera. Great brands joining forces to build a great future, in the dive industry.

Green Force also make a range of HID lights and their agent in the USA is Marine Camera Distributors.

www.marinecamera.com
www.hugyfot.com

Nexus Nikon D70

Especially designed for the Nikon D70, a 6.1 mega pixel single reflex digital camera with interchangeable lenses, the

Nexus has lens ports to support a full range of lenses from super wide to super macro.

Being manufactured from cast aluminum makes this a compact, lightweight and fully featured camera housing using all stainless steel shafts.

Nexus has incorporated precision fingertip action controls with selected metering options, exposure compensation and camera on/off as well as shutter release and aperture selection with right hand control.

Mode selector, bracket exposure and shooting mode controls, focus mode control and a special lens release control are on the right front.

In addition there is AE-L/AF-L control and LCD illuminator as well as shutter speed selection for right hand operation.

There are dual sync ports for strobe sync with standard Nikonos style connector or INON Fiber Optic converter for Inon D180 strobes.

www.nexusamerica.com
www.usanexus.com

Nexus D70 *Digital*

Anthis/Nexus since 1979

Nexus offers amazing features with compact size.

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

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

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

858-455-0873 USA Nexus

What's all the fuss about?

Nikon D70 & the Ikelite housing

by Will Postlethwaite

There has been a good deal of fuss about the new Nikon D70 in the photo media and all of it has been exceptionally positive. They have proved so popular worldwide that supply has been very short but I was lucky enough to get my hands on one, and an early edition of the Ikelite housing, so that I could take it through its paces underwater and find out if it is as good a performer down there as up here.

I took the camera, housing, Ikelite DS125 strobe, EV controller, slaved Sea&Sea YS90, Nikkor 10.5mm fisheye and Nikkor 60mm micro to Raja Empat in eastern Indonesia. Here the subjects really test the ability of the camera and photographer from the smallest, cryptic, macro pygmy seahorses to wide reef scenes clouded in fish with sunbursts blazing through the surface. If the set up could handle this then it really would be the camera we have all been waiting for.

The 2 hours it takes to fully charge the camera battery (Nikon claim this will enable you to shoot 2000 images!) gives you a great opportunity to read the manual - something us boys are usually rather bad at doing but in this case very well worth the effort. The layout is a very accessible and there are even what appear to be a couple of jokes added by those chaps at Nikon advising you not to put your finger in your eye and that deafness can be the result of playing the CD-ROM on your hi-fi.

If you have used a Nikon SLR then the general layout of the camera functions will be familiar and the feel of the body is definitely robust enough for most users. The LCD screen is clear and its brightness can be adjusted to your preference. The function buttons and menu layout I found very easy to use and this augured well for a pressure action situation at 32m! The camera switches in an incredible 0.2s and, with no shutter lag, produces an LCD image within a second. The download time to your CF card depends but, with a good quality card, a RAW image is written in under 3s and it can do this at a rate of 4 fps. This is pretty breathtaking stuff and coupled with the incredible 1/500th flash sync shutter speed, and an improved, fast response auto-focus, I was really keen to get the camera under water.

There were a few camera parameters I wanted to choose before putting the camera in the housing. Not that I could not change them while it was in there, the Ikelite gives you full function control, but I wanted the camera set when I turned it on underwater with a few standard settings. The first was to choose the slowest ISO which is only 200 on the D70, the same as the D100. There have been a few queries over why Nikon have not provided a slower ISO but consensus seems to be that if Nikon do not think you get any less noise with anything less than ISO 200 then why not.

Next I decided to shoot in the Nikon RAW mode. There is the choice of 3 grades of JPEG but the information capture in Raw and the ease of image adjustment using the Nikon View 6 software made it a straight forward choice for me. If the write

times were slower than they are then JPEG might have been an option but as they are so fast and with the capacity for 90+ RAW images on a 512mb CF card there is no need to have compression. If you want to shoot more than 90 pics on a dive then perhaps you should consider video?

Coupled with this I chose to capture the colour information in Adobe RGB. There are two other options in sRGB but if you are going to do any work on your images later on your computer then Adobe RGB gives you a far greater colour range.

I also set the white balance to auto. You have a wide range and a custom mode but these are mirrored in the Nikon Editor software and I feel it is far easier adjust it here where you can accurately see the image on a computer screen rather than on the LCD! While on the subject of the LCD I removed the cover. There is also one feature I liked but might not be to everyone's taste and that is a viewfinder grid. For me, I felt it really helped composition.

Another thing, that I only learnt to do after a few frustrating shots in a cave and on a night dive, was to turn off the AF illuminator. When it is dark the camera does not just use the small red light next to the lens but has a tendency to pop up the internal flash which, inside the housing, glares everything including the viewfinder, making composition almost impossible.

The first test of performance underwater was with the new Nikon 10.5mm fisheye. There were going to be two conflicting factors at work here. I was looking forward to see how the amazing depth of images produced by digital sensors would change the look of super wide angle shots underwater where darkness usually inhabits the middle ground and background. The second was the problem

CCDs have with the sun which we all use in an attempt to fill that dark background and add drama. The blast of light invariably leaves a large area of the image with ugly blocks of white and light blue.

Raja Empat is famed for its pristine reefs, fish life and steep sided islands so, with the vis. an acceptable 20m and the sun shining, how did the camera and housing perform?

The simple answer to this is extremely well. As you can see from the images the high ISO coupled

All photos taken with Nikon D70, Ikelite housing, Ikelite Ds125 strobe and EV controller, Sea&Sea YS90 on slave TTL synced with fibre optic cable, ISO 200, NEF Raw, WB auto

All manual exposures. Only basic contrast and sharpening in Nikon Editor. Some up to 1/2 an EV adjustment.

with the depth of the image produced stunning, wide, complete images of the reef with amazing colour, sharpness and depth of field. When the sun was added to the equation the 1/500th flash sync speed really came into its own. By selecting the correct flash power and aperture and then gradually increasing the shutter speed beautiful sunbursts were easily achievable. Admittedly at 1/500th the image as a whole darkens but with the more gradual shutter speed variation available with the D70 over its 35mm cousins the right effect is far easier to find.

I shot all the images with the camera in full manual mode. I used to use aperture priority more often with my 35mm setup but one of the failures so far in the digital arena is to get the new range of DSLRs to acknowledge they have a flashgun attached to them. They fire the gun but you cannot get the camera to default to 1/60th and no slower as would have been the case before. This is not a real hardship as you do get to see your image instantly on the LCD anyway but it is a shame that the nice AE lock setup on the camera and the housing are thus somewhat redundant. Another small problem arises due to this as the manual mode is next to digi-variprogram portrait mode on the dial. Not in itself a difficulty but if you accidentally jog the dial and then size up a shot there is a good chance in this mode the camera will automatically pop up its internal flash which you cannot then push down and will flash on each shot on the rest of the dive. Beware, but at least with the clear Ikelite housing you can see to check the dials.

So, apart from the odd niggle, top marks in wide angle. In macro the lack of flash TTL was going to be a potential difficulty but the increased depth of field was going to be a bonus. In fact I found that the lack of TTL was not a hardship. With the fine tune variability of both the flashgun power and the aperture, very quickly using the LCD I could close in on the best exposure. I actually felt that I was far more in control of my macro exposure than ever before and composition was instantly reviewable. The autofocus of the 60mm was positive though maybe not quite as good as with my F90X and the viewfinder, although apparently an improvement on the D100, was still rather small and, with the housing in the way as well, it took a bit of getting used to.

Depth of field can only be seen back on your computer and here I found the great results I expected. Another point to note here with exposure is that in the Nikon Editor

— (Above) The author at work. (Ambroise Arnould)

software you can adjust your RAW images up or down by 1/3ev to a total of 2 stops. So complete accuracy underwater is not wholly necessary as long as you remember that there is a great deal of detail retrievable from an underexposed shot but not from an overexposed one.

So all round the camera and housing were a resounding success. The D70 was very easy to use both in and out of the housing. It produced rapid images of stunning quality in very challenging conditions. The Ikelite DS125 with the EV controller gave excellent user control over exposure and this whole feeling was a delight. It gave me a lot more opportunity to experiment and see the results clearly each evening on my laptop, a piece of equipment I found essential. You cannot see focus and, more importantly, backscatter on the little LCD screen even if you do zoom in.

The new compact Ikelite housing shape makes the old bulky feel a thing of the past and in the new digital era of buttons, controls and screens the clear walls are a godsend. I found the fact that I could see the camera buttons inside a great help especially on a couple of dives where the aperture control knob worked loose from the spindle and I was forced on the most fishy of dives to shoot with f4 all the way through. An annoyance but the D70 and the DS125 saved the day as you can see.

If I had one gripe with the camera then it would be that it goes to sleep and in this mode I could not see the aperture or shutter speed settings until it had been woken up. Although virtually instant, the act still produced a delay in a few manta action situations that I found frustrating. However, Nikon have scored a big blow back against Canon with this camera and I am about to utter the worlds I thought I never would, I am not going back to film.

Will Postlethwaite
w.postlethwaite@btinternet.com
www.sevenseasimages.com

www.ikelite.com

Ultralight's Pulse Load Multi Battery Tester

by Tony Matheis

When I saw the New Product Announcement for this battery tester in the Beta version of UWP19 I knew instantly that I had to have one. This device actually tests batteries under load.

We knew that our battery chargers occasionally lied about completely charging a particular cell, this of course becomes quite apparent when you are underwater and can't quickly remedy the situation.

I got in touch with Terry Schuller at ULCS who sent us one so that Deb Fugitt and I could test it on our impending June trip to Indonesia.

Most of us have come up early from a night dive due to a flashlight dying in the midst of the dive or when a strobe quits recycling early. I had just finished completely charging my "C" cells so my charger thought. I put them in a flashlight, turned it on and watched it die a quick 15-second death. Not exactly what I had in mind for flashlight battery life on a night dive. I pulled the cells out of the flashlight, and in 20 seconds tested them on the new battery tester,one of the cells had only 20% capacity

regardless of what my charger said. I opted to believe the tester since the batteries couldn't light my flashlight.

To test AA, AAA, C, and D batteries you push the 'on' button, put the + end of the battery on the + tester terminal and touch the tester's negative probe to the batteries negative end. In about 3 seconds you get a lit up bar indicating % of power capacity remaining. For other battery types there are + and - terminals on the charger, just match up the battery to them and you get the test result. Nice features on the tester are either Alkaline or NIMH batteries can be tested and the tester automatically switches off after 2 or 3 minutes of inactivity.

Seeing how quickly and accurately this little device determined the remaining capacity of our batteries I quickly adopted the habit of checking all our batteries that were charged in the charger that had lied to me about the "C" cell. I found that one bay in the charger had a problem, on 3 other occasions it indicated a battery was fully charged when it only had 20% of a full charge. Nice to catch a problem before it hits you underwater.

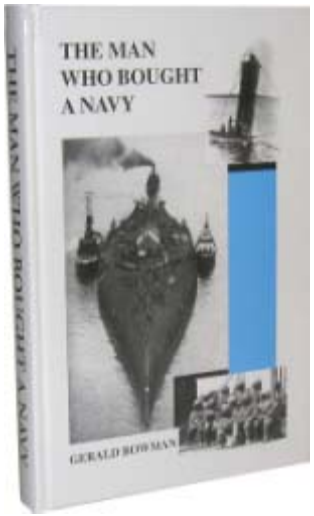
We tested it on AA, AAA, C, NIMH and Alkaline batteries, and 9 volt alkaline batteries with good results on all but we didn't test it on D batteries,CR123, CR2 or CRV3 Lithium batteries since we don't carry these batteries.

I think in the world of fluctuating power in most of the remote places that have great diving this little gem is a necessity, a very inexpensive essential piece of our tool kit.We won't travel without one.

Ater returning home we contacted the dealer for the charger that failed and it was replaced with no questions asked.

Tony Matheis
uwp@nightdivers.com
www.ulcs.com

The Man who bought a Navy



Pieced together after much research and told for the first time in this autobiography is the astounding story of what is regarded as the greatest achievement in the history of marine salvage - the raising of the German Fleet at Scapa Flow.

The Man who bought a Navy contains 249 pages and has over 100 photographs.

Copies cost £19.95 (+£3 UK postage) *To order your copies, contact* PR Productions. Tel 44 (0)20 8399 5709 or email peter@pr-productions.co.uk

www.pr-productions.co.uk

Flashtrax multimedia

By Peter Rowlands

There's a saying in the computer world that you only become interested in backing up data after you've lost something vital into which you had devoted a lot of time and effort. As a result I've always been a paranoid backup freak.

When I go away on a photo trip I try to have backups for literally everything - battery chargers, power supplies, cameras, flashguns etc etc. My principle is that if I have two of everything I probably won't get put out of action if something fails.

But in my armoury of photo attire I have a weak link in that, if my laptop computer was to fail, I would have no way of downloading images to view and assess.

With this in mind I researched a solution to this problem and discovered a very neat, small and light hard drive which is designed to either replace a laptop or act as a backup.

The Flashtrax I was sent for review had a whopping 80gig hard drive and a 3.5" screen for viewing images. That's more than enough memory to store thousands of RAW image files and a screen big enough to asses composition, exposure and focus. In addition there is an AV out socket for viewing images on either PAL or NTSC televisions.

Using the Flashtrax is a breeze. Take the CompactFlash card out of your camera, plug it into the Flashtrax and press the "Copy" button. The images are then automatically downloaded complete with all the filenames and photo data.

In practice what I did was download images to my laptop and then do a backup onto the Flashtrax. If I then wanted to be truly 'belt and braces' I could burn a CD from my laptop. The result was a feeling of total control over my backup paranoia.

The Flashtrax measures in at just 143x92x32mm (5.63x3.62x1.26 in) and weighs a mere 340g (12oz) so is highly portable and comes with a Rechargeable Li-Ion battery (2200 mAh capacity). I always used the Flashtrax with the provided power supply but I understand you could download between 3 and 6 gig of images before needing to recharge the battery.

The FlashTrax directly reads CompactFlash (CF) and IBM microdrive cards and SD/MMC, SmartMedia, Memory Stick or Memory Stick Pro cards with an optional adaptor.

As if this little miracle device was not clever enough it can also play MP3 and WAV audio files, video files and when plugged into your laptop via the USB2.0 socket it automatically mounts on your desktop and acts like any other hard drive so you can also backup your data files or even do a complete backup of your laptop. Versatile indeed!

The 3.5" Flashtrax screen compared to a 15" laptop.

The FlashTrax system requirements are Windows ME, 2000 and XP or Mac OS8.6+ and any OS10.

From my point of view the FlashTrax has been the perfect addition to my survival arsenal. Its image backup reassurance was the initial attraction but the ability to kill time in airports listening to music or video together with a laptop data backup capability has made it a much used and valued item.

Such versatility does not come cheap compared to normal portable hard drives but I think you're getting a lot of performance for your money. There are 3 models available 80gig, 40gig and 20gig priced at $699 (£440), $499 (£330) and $399 (£260) respectively.

For further details visit www.smartdisk.com

Fuji Finepix F710 and WP-FX701 housing

The FinePix F710 Zoom enters Fujifilm's range as a partner to the FinePix F700 Zoom but now has a 4x zoom lens, widescreen LCD display and a pop-up flash.

In recognition of the growing popularity of the widescreen format used in a range of consumer electronics products, the FinePix F710 Zoom incorporates a new 2.1" widescreen LCD for image capture and playback of 16:9 format images - a picture size adjusted for optimised playback on widescreen televisions.

The 16:9 format on the F710 is similar to many video cameras and is not true 16:9. It achieves the format by chopping the top and bottom of the 4:3 frame and elongating it. On video cameras this results in a loss of quality but the F710 achieves this with virtually no loss. In truth it would be possible to achieve the same effect by cropping your conventional format images but you would have to do this frame by frame which would be very tedious so the F710 is a very welcome arrival.

The FinePix F710 Zoom uses 3.1 million S-pixels and 3.1 million R-pixels to produce an ultra-smooth output image of 6.2 million recorded pixels and the quality of the pictures confirms this.

At just 109.5 (W) X 54 (H) x 29 (D) mm and weighing 210g (excluding batteries and media) the F710 is very pocketable and when turned on is ready to take shots in about a second which is very impressive.

Downloading pictures to a computer is via a USB2.0 port on the camera or via a very useful dock which incorporates USB2.0 and recharging facilities. The F710 has a proprietary NP-40 710mAh battery which should be enough for 135 exposures with the LCD screen on.

Pictures are captured on miniscule xD-Picture Card™ cards which I understand can now go up to 512mb.

It is very difficult to review the new breed of polycarbonate underwater housings without waxing lyrical. The quality of design and construction is awesome and, for what you are getting, the price is miniscule. All of the cameras controls can be accessed by either push button, rotary or flip switches, all of which fall easily to hand.

The main seal is a piston design and the locking catch is rotary with a manual locking lever.

The built-in flash can be activated from the housing but there is now way of turning it off once it is opened either physically of from within the menu. Having been used to a camera and housing combo which allows me to do this I would find this an irritation but I suppose I could always cover the flash with your hand if needs be.

The glass front lens port is

retained by a plastic ring which does not have any filter threads which is a big limitation if you want to add wide angle and close up supplementary lenses. Inon make adaptors for other housings to allow extra lenses to be fitted but they do not make them for Fuji housings at the time of writing.

Overall the F710 and its 40 metre housing are a good combination offering 16:9 output and ease of use but it would have been nice to an automatic locking lever which most other housings have, the ability to turn off the flash and a threaded front lens ring so that additional lenses could be fitted. Having said that, the F710 combo is certainly one you should consider if you want a versatile point and shoot system but if you want to expand your underwater photographic capabilities there are other housings on the market which would be more suitable.

Peter Rowlands

peter@uwpmag.com

Why advertise in UwP?

This page could be yours for just $340

UwP Readers are 100% UW Photographers

UwP readers are underwater photographers or those who wish to be. 100%.

While many magazines have a larger circulation, only a small percentage of those are photographers.

UwP has a minimum of 23,000 readers.

'Readers' are photographers who visit the website and **choose** to download UwP issues.

Worldwide audience

Subscribers are located in **over 100 different countries** with the majority from the USA, UK, Australia, Canada and Europe. The Asian subscriber count is growing rapidly. UwP logged website visitors from 101 countries.

A Majority of Beginners

Subscriber demographics also tell us that over 70% of readers are beginning or intermediate underwater photographers who are interested in learning the basics of underwater photography or expanding their knowledge with expert tips & techniques.

Strong Growth

The exponential growth in UwP's unique website visitors and readers began in August 2003 and has climbed steadily upward on a steep incline increasing by over 600% in the past year..

Hundreds of 'Refer a Friend' forms are sent each quarter.

UwP rates are much lower than conventional magazines

How Do We Know Who Reads UwP?

Each website visitor is assigned a cookie which is stored on their computer, then checked and saved in our log when the photographer downloads an issue. This ensures each photographer is counted as a 'reader' only once. It is also checked to ensure the unique website visitor count is accurate.

Reasonable Rates

There is no better, more cost effective way to get your message to underwater photographers than with UwP.

E mail Deb Fugitt
marketing@uwpmag.com
USA 817 626-0636
UK 44 (0)20 8399 5709

www.uwpmag.com/sponsors

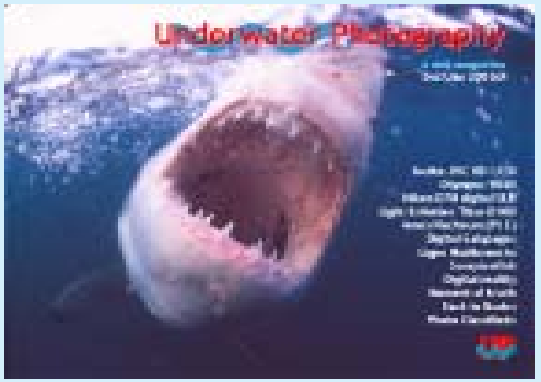
UwP Sponsors Receive these Benefits:

in Magazine Issues:

- ad space
- active links from ads to website & email
- active links to sponsors websites appended to content appropriate articles
- 24 / 7 / 365 availability of your ad in archived issues

on uwpmag.com:

- rotating small banner on home page
- logo, description, link on sponsors' page
- rotating small banner on other web pages
- opportunity to add larger banner to home and download pages.



UwP uses a conventional magazine format adapted for the web. UwP readers spend hours reading UwP issues rather than minutes scanning a website.

Breathhold Subjects

by Phillip Colla

Until about 1994 the vast majority of my diving was done at San Clemente Island, either with a tank or without, searching the kelp forests for interesting animals and compositions. Since then, however, I've virtually given up conventional tank diving, preferring to spend my few free days roaming offshore in my little boat, looking for "stuff to shoot". Historically, offshore waters have been the territory of fishermen and spearfishers more than divers since it was thought that there is not much for a diver to see out there. Indeed this is typically true. Just finding something offshore to observe is sometimes an exercise in frustration and dramamine. But the last few decades have seen photographers turning their attention to these waters with remarkable results, capturing marvelous images of tuna and billfish, gelatinous zooplankton, and whales and dolphins.

My introduction to bluewater diving came ten years ago when I received a call from Mike Johnson inviting me to join him for a day hopping kelp paddies off San Diego. Mike is known for his incredible photos of ocean sunfish and blue whales, images that have been published in many notable journals, National Geographic among them. At the time, though, I simply knew him as the guy who took the cool photos of the weird fish, and I had told him I was curious about the offbeat diving he did. We hit it off well and I began joining Mike on his frequent summer excursions out on the open ocean. A few years later I picked up a small boat myself, at which point my weekends plans were set from May through October.

As I've grown older and softer (!) I find that this has become, for me, primarily a summer pursuit, but occasional past forays on the water in winter or early spring have yielded a few photos. Usually I will be out of sight of land, often out of radio shot of the coast, often accompanied by a friend or two but sometimes alone. In a sense this is a numbers game predicated on the notion that one needs to get only as far offshore as necessary to find a combination of strong sunlight, worthy animals and clean water. Countless are the days I've had two, but not three, of these critical factors. Yet if I put in enough days on the water, hope for a little luck and keep an ear to the ground for news from the fishing crowd, then I can expect a handful of trips each summer to yield all three. On these days my buddies and I shoot film until the sun goes down. The result is a few keepers, a huge proportion of duds and a once- or twice-a-year stunner.

Ocean sunfish (*Mola mola*), somewhere way offshore of San Diego or Baja California

Most summers ocean sunfish are an obvious photographic subject—provided they are around. Sometimes we may drive 100 miles in a day and not see a single mola yet a few weeks later there may be so many we need to watch carefully to avoid hitting them as they bask near the surface. These curious fish roam the ocean in search of food, following gelatinous zooplankton to all points of the compass as well as into the abyss (researchers have recorded molas on extremely deep dives). Of course we only see them near the surface, which is the most pleasant place to photograph them anyway. Strobe light tends to burn out a mola, and virtually all of my favorite sunfish photos are shot with little or no strobe light. High overcast clouds rather than a clear sky yield the optimal light – diffuse but still bright—for photographing sunfish. I like to use Nikonos 15mm and 20mm lenses for these animals. Since the pace of the mola action is usually glacial, no motor drive is necessary and bracketing exposures – a good idea with such a contrasty scene – is easily achieved with any camera.

Some molas grow to be immense, 10' (3m) or more from tip to tip (dorsal to anal fin), weighing more than 2000 pounds. I've only seen a few of that size and they are impressive. Bigger molas are usually loaded with external parasites. It is presumably these parasites (often copepods) and the mola's desire to be rid of them that brings a mola to drifting kelp. Drift kelp is a magnet for fish: small fish seek protection in an otherwise exposed environment, and large fish are there to eat the smaller. The molas hang out alongside the drift kelp and soon fish within the kelp venture out to the mola to clean it. It's a curious scene, an open ocean cleaning station far more impressive than the reef variety.

Guadalupe Fur Seals (*Arctocephalus townsendi*), Isla Guadalupe, Mexico

Guadalupe fur seals are my favorite mammal. They have a regal bearing, more so than the more familiar sea lions, and require that an interested diver show patience and restraint in his approach before they will permit him near enough to photograph their natural activities well. Adult Guadalupe fur seals are too refined to engage in the same sort of divebombing play that sea lions exhibit. Rather they may show – if it suits their mood – a vague and lofty semi-interest in a visiting diver, something like that shown a waiter by a party guest in the Hamptons. A fur seal's thick, two-layered fur constantly emits a thin stream of bubbles underwater. This makes for long glimmering contrails lingering behind swimming fur seals, difficult to capture on film.

It is estimated that Guadalupe fur seals once numbered over 200,000 and ranged from the Revillagigedos to the Channel Islands. However, with the exception of a small colony of *Arctocephalus townsendi* at Isla Benito Oeste along the coast of Baja California, the only spot on earth with sizable numbers of Guadalupe fur seals is Isla Guadalupe itself, where the fragile population is staging what appears to be a strong recovery after being hunted so hard by Russian sealers it was considered extinct for thirty years in the early 20th century. I've spent hundreds of hours in the clear shallows of Guadalupe Island admiring and photographing these elegant pinnipeds, watching as they rest and play in small groups hovering over vast expanses of gold kelp. In spite of the tranquil scene, diving at the island always feels a little edgy. Most divers I've spoken with will not dive at Isla Guadalupe except from the safety of a cage, which is understandable given the many great white sharks the island accommodates. Indeed, for years the annual spearfishing and diving trip organized by my friend Skip Stubbs

was the only one to the tuna-rich island in which people entered the water willingly, predating the many cage trips there that are now so popular and which are bringing an appreciative audience to this remote and special place. Every other year or so spearfishers on our trip encounter a great white, but fortunately no attacks have occurred yet. Guadalupe fur seals deal with the threat of attack from below constantly, and I've seen a number of adult males who must spend their days in the water patrolling their territory with fresh bite marks on their hindquarters. I believe it is for this reason that they have adopted an in-water head-down resting posture quite different from their seal and seal lion cousins. In fact, one way to quickly tell that a raft of floating animals is composed of fur seals rather than sea lions is the near absence of heads above water for fur seals – they are too busy keeping an eye out for what's below. I have seen similar posturing among Northern fur seals at San Miguel Island in California, another white shark zone.

Should you ever find yourself in the waters of Guadalupe or San Benito Islands and wish to photograph the fur seals there, my advice is to turn off your strobes and stay back from the seals for a while. In most cases these animals have never seen a diver before and they need time to become comfortable with your presence. I've seen many fur seals bolt or back off when nailed by strobes by a diver swimming toward them. It pays to wait and allow them to swim over for a first look. Eventually they will resume their head-down rafting at which point you may be able to approach close enough for good shots. Strobes serve little purpose with these densely furred pinnipeds, except to toss a catch-light into their eyes and brighten the muzzle a bit. The fur seal's coat normally absorbs all the light you can throw at it. I only turn strobes on when I have an individual who I've spent 30 minutes with and is totally comfortable with me, and with whom I've already shot a good selection of available light shots.

Blue whale (*Balaenoptera musculus*), Baja California, Mexico.

This photograph is soft. Yet the subject is about as magnificent as they come, so I am pleased with the photo, the encounter and my good fortune. One of the challenges of photographing a blue whale is being able to see the entire animal at once, above water or below. Seriously, they are usually longer than the visibility of the water so that only a portion of the animal can be seen at any moment. Another challenge is meeting a whale that is sufficiently inquisitive to swim close enough that a photo with any detail at all can be obtained. A body length is a reasonable measure of proximity for any large creature underwater. For a humpback whale this is only about 20-40', which provides for some detail in clear tropical

water. A body length for a blue whale is 50-80' or more, which is generally not near enough in temperate West Coast water for any appreciable detail.

Of course the most important element to such a photo is luck, manifest as simply seeing a blue whale, ever. These enormous animals migrate between Oregon and central America annually, tending north for feeding and south for calving and perhaps mating. Researchers are now learning much about blue whales, and it appears the northeastern Pacific population is thelargest in the world. Most summers off San Diego or northern Baja boaters (usually fishermen chasing tuna) eventually see a blue whale, usually in the distance as a blow or raised fluke. Occasionally, however, a blue whale will unexpectedly surface near a drifting boat with a huge blow and catch everyone by surprise, causing general mayhem as sandwiches are tossed aside in a rush to grab topside cameras. (I've heard this referred to as "getting puckered", for obvious reasons. As in "Wow, we just got puckered by a blue whale!") In some of these instances the whale is inquisitively inspecting the boat. An 80' animal that can be seen from the deck as it passes silently just below is an intimidating sight for those in a small skiff. This has happened to us several times, including while tied to a kelp paddy working molas or plankton. In a few instances we have managed to hop in and hang alongside the boat hoping the whale would swim by for another look. This photo is the result of such a fortunate happenstance: a whale that repeatedly swam under our boat apparently curious to see what we were. It was taken with a Nikonos V and 15mm lens, as I recall shot on automatic with a Nikonos 15mm lens, pushing the film at least a stop. The dim light and specific response of the film led to quite a bit of haze around the animal in the blue channel, so I resorted to using the green channel only for a more pleasing and contrast-rich black and white rendering.

Giant kelp (*Macrocystis pyrifera*), San Clemente Island

It is my spirited opinion, one that I enjoy defending over a beer after a long day on the water, that diving amidst giant kelp is the most magnificent diving in the world. I am fortunate enough to have had some amazing experiences underwater – watching swarms of hammerheads

soar overhead, riding the broad back of an accommodating manta, being eyeballed by an inquisitive whale. However, the diving I consider best is that found in the splendid kelp forests along the coast and offshore islands of California. Vast beds of giant kelp line the shore, rising from rocky reefs nearly 100' deep to reach the surface before spreading out to form a thick floating canopy. Underneath this canopy, the sensation of swimming amid the columns of kelp plants is akin to flying through a terrestrial forest. Corridors between kelp stalks lead to wide openings in the forest in which schools of fish hover. Shafts of light filtered by the canopy above fall across kelp to the reef below. When the current shifts and bends the kelp stalks in a new direction the topology of the forest changes.

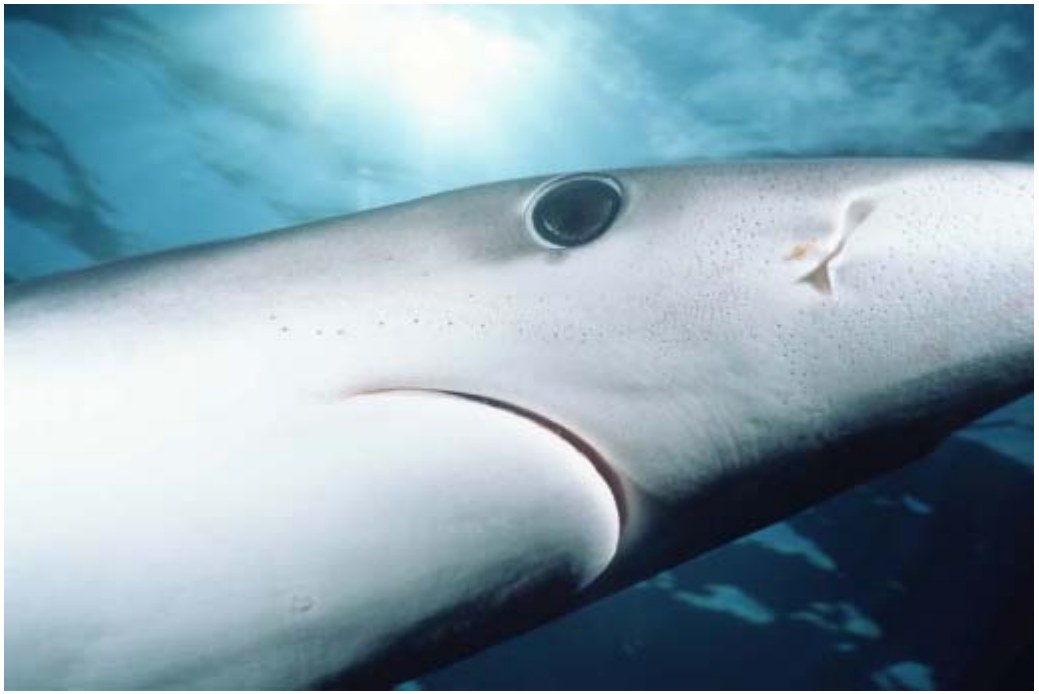
When the goal is simply to swim in and admire a kelp forest, nothing beats the clear waters of Southern California's San Clemente Island in late summer. On a good day the panorama at San Clemente is stunning: kelp in all directions reaching from seafloor to surface, summer sun and canopy shadows that are constantly changing, fish swimming the avenues of the forest and visible over 100' away. One is enveloped – literally – by life as far as one can see, an effect I have experienced only a few times, and fleetingly, elsewhere in the ocean. On a day like this I'll spend as much time in the water as possible, staying just below the surface to take advantage of the wonderful quality and variety of sunlight in the canopy, waiting for subjects to photograph against a backdrop of kelp. There are always garibaldi, kelp bass, various wrasses and juvenile fish hidden among kelp fronds to photograph year-round. It is September and October – the magical Indian summer months at Clemente – that are my favorite as they have brought torpedo and bat rays, seals and sea lions, huge schools of salema and mackerel and enormous sea bass though the forest in front of my lens: wonderful animals in a spectacular setting to spite my limited ability to capture them on film.

It is easy to lose other divers and find solitude in a kelp forest. Sometimes I will spy another diver hovering in the forest staring up and around at the kelp rising on all sides of him, as if in a trance. Either he is totally lost or simply enjoying the surroundings – either way, I know how he feels. At times I do the same thing, finding a particularly appealing spot and shooting all my film on the weeds themselves in an attempt to get one perfect photograph of the kelp forest. It's a photograph I will likely never achieve as the kelp forest is too grand to adequately capture on film.

Virtually all of my photos in the kelp forest are shot with a Nikonos V and 15mm lens. Occasionally I will use a fisheye, since kelp is so bendy anyway that the fisheye's distortion is less noticeable.

Blue Shark (*Prionace glauca*), somewhere offshore of San Diego or Baja California

Blue shark diving is quite easy and inexpensive. Drive 5 to 20 miles offshore until the water turns blue and then a few miles further to be safe. Hang a $20 bucket of chum over the side, drift and wait a while, and take a nap. A gentle wind is helpful in order



to produce a long chum line. Hopefully a shark or two will show up at which time it is appropriate to quietly slip in, hope it does not flee, and start to photograph it. There is no need for cages, chain mail or dramatics. If you are really lucky a mako will arrive too, which raises the excitement. In practice, the only real problem with photographing blue sharks these days is that far fewer blue sharks appear at the chum bucket now than did fifteen years ago. If would be nice if this were because the quality of the chum has worsened. However, I believe the number of blue sharks has declined, drastically so, due to longlining and other commercial fishing pressures. This is simply my anecdotal observation, but I feel certain that my feeling that blue sharks have declined in my area (San Diego), if not the reason for their decline, is supported (or would be) by research. Some days we are lucky to get a few small ones, other days none at all. It is really discouraging. Getting a nice six or seven footer is rare now, but it used to be common to have a half dozen or more around the boat all day using just a small bucket of frozen chum and some frozen mackerel carcasses.

Like all sharks, the ventral surface of a blue shark are very reflective. Even with my old dinky low-powered MCD strobes I was able to stop down to f11 or f16 on these sharks, allowing for nice close-focus wide angle photography with a 15mm or even a close-up lens. The challenge is to form an interesting composition. These sharks are so well photographed that a simple "blue shark in blue water" photo, even if perfectly exposed, is likely interesting only to kids and the most manic shark aficionados. I've not had much luck composing sharks with divers, largely because I either do not have anyone else in the water to shoot or my partner is as much a photographer as I am and thus a terrible model. So I have had to resort to shooting blue sharks against kelp, when the opportunity presents itself.

Phillip Colla

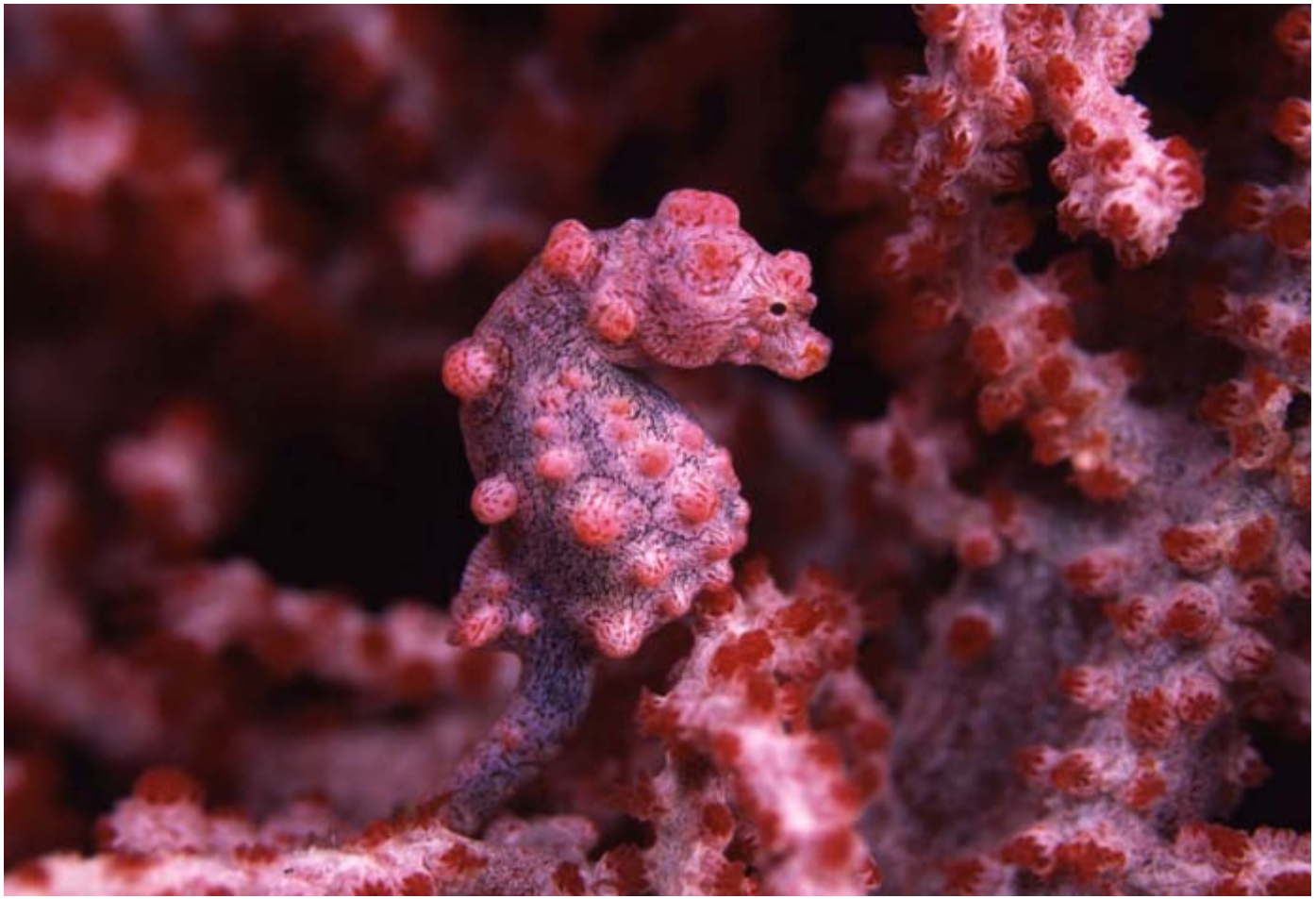
www.oceanlight.com www.gygis.com

(Right) Phillip Colla at work. Photo by Mike Johnson

Phillip Colla is a natural history photographer, videographer and writer specializing in wild marine mammals (whales, dolphins, seals), remote islands of the eastern Pacific and the California kelp forest. His work has been published in a few publications, most notably: BBC Wildlife, International Wildlife, Ranger Rick, Nature's Best, Sportfishing, Reader's Digest, Skin Diver, Scuba Diving, Sport Diver, Unterwasser (Germany), Marine Photo (Japan), Science, Islands, The New York Times, United Press International, USA Today and National Geographic Society Books as well as lots of aquariums and museums.

The Underwater Paradise of Cabilao

By Nonoy Tan



Well-camouflaged red pygmy seahorse. Nikon F100, Ikelite Housing, 105mm 2.8 AF lens, Ikelite Substrobes 200, RVP135, F22, 1/250, TTL

After a two-hour car ride and an hour boat travel, I finally reached my destination - Cabilao, an isle paradise located near Cebu, Philippines.

Before coming here, I had read exciting accounts about Cabilao Island, particularly about the stargazers and pygmy seahorses that reside in its surrounding waters. On this trip, I was determined to see these critters, at the same time discover other things that Cabilao had to offer.

The white-sand beaches and crystal blue waters immediately captivated me. As I went to shore, my gracious host Babie gave a pleasant welcome of her vacation haven called La Estrella dive resort. The ambiance scene was very tranquil. Apart from the intermittent courting sounds of the birds, I could hear only the rhythms of the sea and wind. Located a few steps from shore was the native-inspired restaurant where I had an ice-cold drink offered to me by the staff. Later, I was guided me to a nipa hut that would be my home for the next four days. In front of the hut was a hammock tied between two coconut trees. It was very inviting.

After settling in, I decided to comb the beach. At a distance, I could see the SCUBA diving facility earlier pointed to me by Babie. I headed towards its direction. Upon reaching the place, I was met by the "Sea Explorers" dive personnel with whom I had a chance to plan my diving itinerary for the subsequent days. I would be provided with a dedicated dive guide so I could have a lot of flexibility and time to take photographs. My expectations were high.

The following morning, I was at the dive facility early. In no time, I was geared up and ready for the dive. Together with an expert guide, we took a shore entry into calm and clear waters. Less than ten minutes into the dive, I discovered a long-snout pipefish hidden among the seagrass. With a length of about a foot, I could easily have mistaken it for a dead tree branch. Apparently confident of its

A stargazer in full view. Nikon F100, Ikelite Housing, 105mm 2.8 AF lens, Ikelite Substrobes 200, RVP135, F22, 1/250, TTL

Closer inspection of soft corals reveals a variety of residents such as the porcelain crab. Nikon F100, Ikelite Housing, 105mm 2.8 AF lens, Ikelite Substrobes 200, RVP135, F18, 1/250, TTL

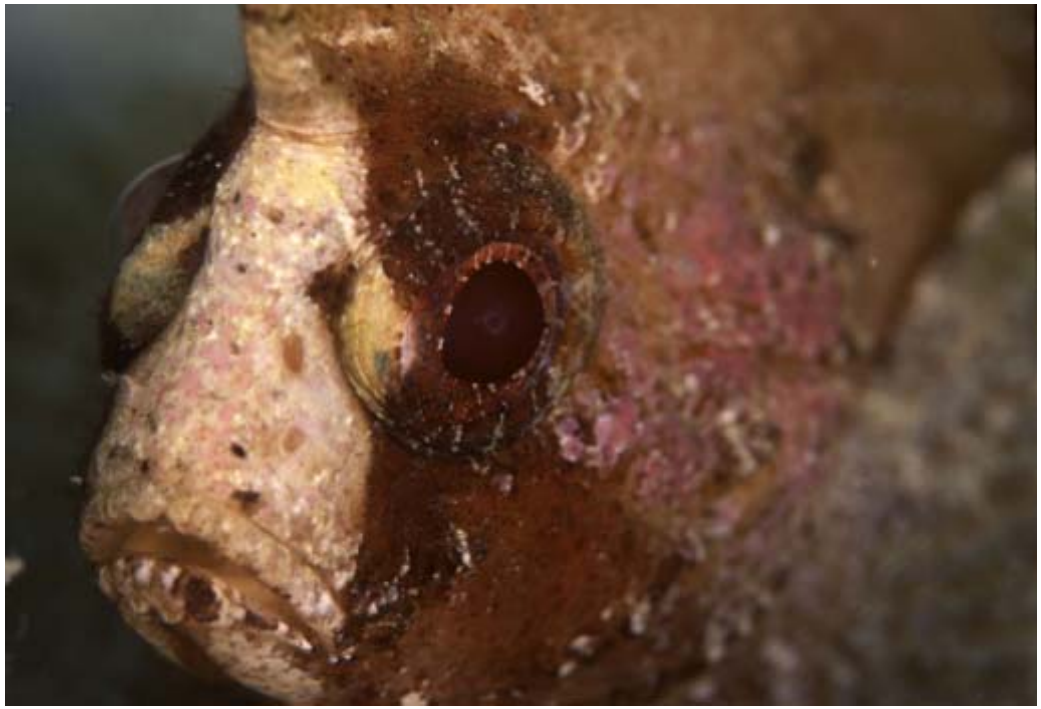
camouflage, it was unmindful of my presence as I took a few photographs. A few minutes later, my guide pointed a porcelain crab to me. I clicked the shutter several times and then continued to trail my escort.

Upon reaching 80 feet, I noticed a magnificent red sea fan stretching out to the open sea. Upon closer inspection, I detected a red spider crab slowly moving across its branches. The crustacean had overly long and thin legs; it looked like a spider. After taking several shots, I realized that this dive was becoming photographically intense.

Subsequently, my guide led me towards an adjacent sea fan. He aimed his finger to a pair of red pygmy seahorses. One was a third of an inch in size, while the other was even smaller! They easily blended with the color and texture of the tiny coral branches; their camouflage was perfect I had to keep my eyes glued on them in order not to lose them from my sight. At one time, I made the mistake of glancing at my camera controls and consequently lost sight of the pair. I spent several minutes searching the same coral while the seahorses remained motionless. Completely delighted at finding them again, I took their images until my film was almost exhausted. It was time to head back to shore.

On my return journey, the sight of a two-inch Pegasus seamoth darting across the sand caught my attention. It had a long snout and a scaly body, but looked nonetheless beautiful. Just as I had used my last film exposure, another seamoth emerged into the scene. This new seamoth was larger and had an alluring mint green body color. Too bad, I did not have any film left in the camera. Nonetheless, I was determined to go back later in the evening. In the meantime, the hammock in front of my hut was waiting for me. As a result, I spent the rest of the day in dreamland (sleeping).

By nightfall, I was well rested and ready for another dive. Armed with a flashlight, I was soon underwater. Crabs, prawns, eels stalked the reef for food. Particularly interesting was a stargazer that



This leaf fish willingly posed for a portait. Nikon F100, Ikelite Housing, 105mm 2.8 AF lens, Ikelite Substrobes 200, RVP135, F18, 1/250, TTL

A seamoth. Nikon F100, Ikelite Housing, 105mm 2.8 AF lens, Ikelite Substrobes 200, RVP135, F16, 1/250, TTL

laid motionless underneath the sand waiting for unsuspecting prey. As I took a mug shot of this monster in disguise, another stargazer suddenly jumped out of the sand beside me. Curiously, it exposed itself for a few seconds before digging back into the sand. Other critters showed up as well, such as the brown leaf fish that posed while I took a portrait photograph. After a few minutes, an octopus appeared. This nocturnal predator was oblivious to my presence as it prowled the reef while using its tentacles to poke inside rock crevices in search of prey. I followed the octopus for several minutes until I spotted a soft red coral. Upon closer inspection, I discovered a thorny little crab crawling across the stems. Its red and white coloration, and spiny body mimicked its soft coral host. Unless it had moved, I would not have noticed it.

As I explored the reef, I realized that the underwater night scene was full of life. I was already awed by the large amount of activity in the reef. Again, I ended the dive with great anticipation that the succeeding days will be as enchanting. I was not disappointed. For three more days, I savored the sights underneath the waters of Cabilao - beyond doubt, a paradise for critter shutterbugs.

Nonoy Tan
nonoytan@yahoo.com

Nonoy Tan was born in Manila, Philippines. He started diving in 1997, and immediately took a keen interest in underwater photography. He is especially fond of capturing images of marine life behavior and critters found during endless muck dives. By profession, Nonoy is a development worker, who spends most of his time (when not underwater) in the poor, rural communities of Asia and Africa.

In-depth photography portfolio with trade secrets revealed, Best Dive Sites

Rated as the Best underwater photography magazine in the Asia Pacific

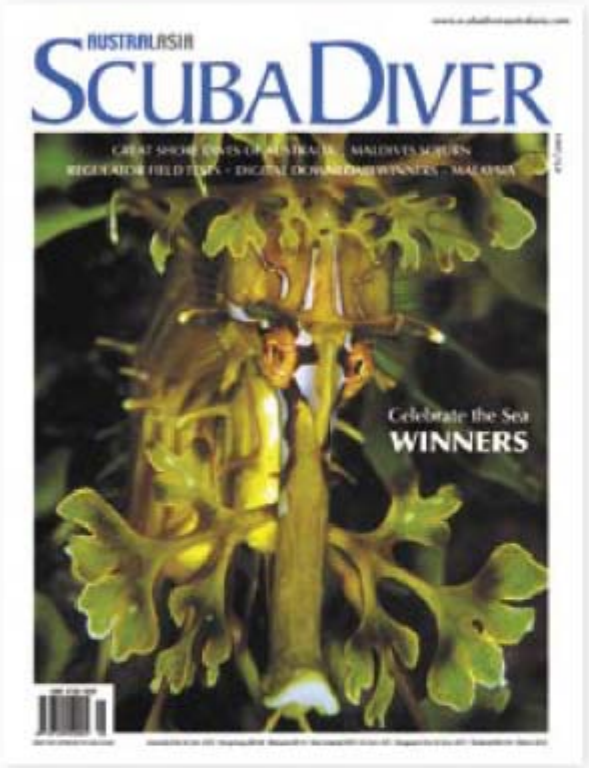
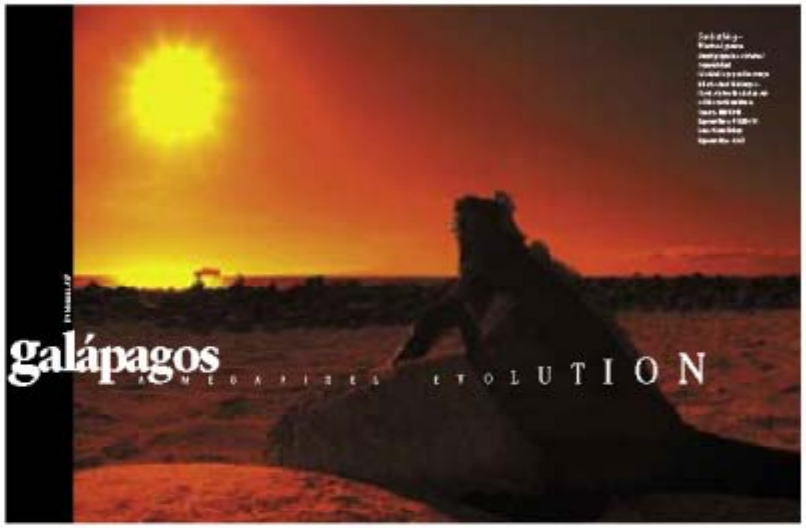


photo Annual (2003)



US$10 postage included – world wide Or

US$25 – with Golden Dolphin DVD ROM Biennial Edition – postage included

save up to 25% off newsstand price

SUBSCRIPTION 6 ISSUES (ONE YEAR) / Renew my Subscription (*FREE Xplorer Membership*)

☐ Singapore S$32/ ☐ Malaysia S$35/ ☐ Australia A$37.50/ ☐ Hong Kong S$35/ ☐ Asean (excl, S'pore & Malaysia) S$45/
☐ Rest of Asia S$50/ ☐ Outside Asia S$60/

SUBSCRIPTION 12 ISSUES (TWO YEARS) / Renew my Subscription (*FREE Xplorer Membership + NEW Say No to Shark Fins T-Shirt*)

☐ Singapore S$60/ ☐ Malaysia S$65/ ☐ Australia A$70/ ☐ Hong Kong S$85/ ☐ Asean (excl, S'pore & Malaysia) S$85/
☐ Rest of Asia S$95/ ☐ Outside Asia S$112/

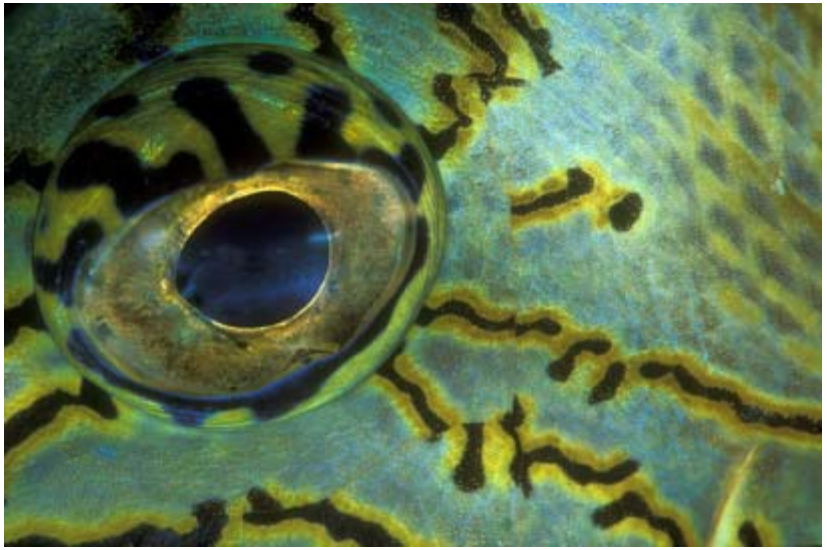
To subscribe or order the Photo annual 2003 email: lucia@asiangeographic.org

SINGAPORE: Asian Geographic Magazines Pte Ltd, 36 Jalan Puteh Jerneh, Singapore 278058
AUSTRALIA: Asian Geographic Magazines, PO Box 2138 Carlingford Court Post Office, Carlingford, NSW 2118 *(A$ payment accepted, A$ cheque made out to Asian Geographic Magazines).* **SINGAPORE Tel: (65) 6298 3241, Fax: (65) 6291 2068 | AUSTRALIA Tel/Fax: (61) 2 9686 3688**

Turks & Caicos

Wides & Macros

by Bernardo Sambra



Queen Trigger Fish eye (balistes vetula). Nexus F100 Housing + 105mm + 2 Sea&Sea YS-120 Duo strobes both on TTL. 1/90@ f22. Velvia 50.

Not being able to change lenses underwater is at times very frustrating. Few things in life anguish me more than when I come out of the water, with an empty tank, no film in the camera, desperate to get back in and facing the difficult situation of deciding what lens to fit for my next dive. As strange as it may sound, I live in a constant desire for this anguish. I would love it to be a permanent state of mind. In a perfect world each dive site would offer such a variety of species, light and forms that it would constantly place me in the dilemma of deciding what equipment to take down. Even better, wouldn't it be great if the situation forced me to dive with two cameras simultaneously. Unfortunately, few places in the Caribbean have made me feel this way, were I have to plan everything so meticulously that I don't miss out on anything from the huge offering before me. These places are scarce, but one of them must surely be the Turks & Caicos.

The Turks & Caicos archipelago ("Turks" comes from the type of cactuses abundant in these islands and "Caicos" meaning island chain) is situated in the middle of the Caribbean just north of the island of Hispaniola and a mere hour and a half flight from Miami. The Columbus Passage, a 19 miles wide channel reaching depths of 7,000 feet, runs between both island groups. Providenciales or "Provo" as it's locally known, is the point of arrival and thus houses most of the tourist population. From Provo one can reach the remaining 7 inhabited islands or any other of the solitary beaches and keys distributed in a 190 square miles area. Providenciales, East Caicos, Middle Caicos, West Caicos, North Caicos, South Caicos,

Old boat in French Key. Nexus Master Housing + 16mm. Natural light. 1/125 @ f8. Provia 100

Horse Eye Jacks (caranx latus) school. Nexus Master Housing + 20mm + 2 strobes Sea&Sea YS-120 Duo on manual, full power. 1/90 @ f5.6. Velvia 50.

Caribbean reef shark (carcharhinus perezi) in movement. Nexus Master Housing + 20mm + 2 strobes Sea&Sea YS-120 Duo on manual, full power. 1/15 @ f5.6. Velvia 50.

Salt Key and Grand Turk are, from a diving point of view a varied mixture of options which at the end of the day can create problems when deciding where to dive. Making any choice will always leave you wondering if it was the correct one or not. However, most of the diving hot-spots are concentrated on the western part of the archipelago around Providenciales, West Caicos and the tiny French Key.

Although I had read numerous accounts on the wonders of the Turks and Caicos in books, magazines and the web, I remained skeptical on my way there, remembering many trips to the Caribbean which simply did not live up to my expectations of the quest for the anguish I've already told you about. Well, I was happily proven wrong. These islands satisfied my longing and enabled me to channel it through my camera thanks to the infinite wealth of imagery the place has to offer.

Wide side

One of the main goals of this trip was to capture on film the well known sharks of French Key. This small island lies 40 kilometers south of Providenciales and it made me realize why the Turk & Caicos should be seriously considered as an alternative Caribbean underwater photography destination. Underwater visibility can reach an incredible 200 feet and the diversity of diving options is excellent. Places like Double-D, Rock & Roll or G Spot can satisfy the most demanding underwater photographer. Right from the first dip in these warm waters, I found myself surrounded by large Caribbean reef sharks reaching more than 7 feet in length and was able to shoot them with my entire collection of lenses at different times of the day. Spotted eagle rays, huge schools of jacks, bottle nose dolphins, scalloped hammerheads and

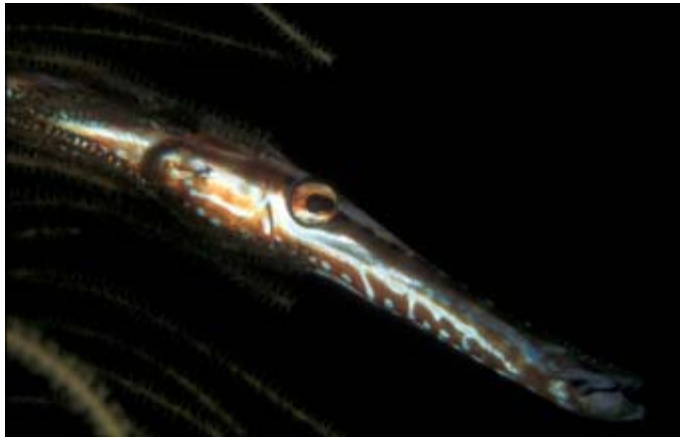
Turks & Caicos gin-clear water sometimes reach amazing 200 feet of visibility. Nexus Master Housing + 20mm + 2 strobes Sea&Sea YS-120 Duo on manual, half power. 1/60 @ f8. Velvia 50.

less frequently tiger sharks all enact this vast underwater spectacle and help remind us that leaving the wide angle lens on shore is nothing less than a mortal sin.

Many are the wonders of the Turks & Caicos

Yellow line arrow crab (stenorhynchus seticornis) . Nexus F100 Housing + 105mm + 2 Sea&Sea YS-120 Duo strobes on TTL. 1/60@ f22. Velvia 50.

but their main attraction and surely their hallmark must be the huge humpback whales (Megaptera novaeangliae) which abound in these waters during the months of January and February. During this time of the year, these wonderful creatures have just completed their 40.000 miles migration from the



Trumpet Fish (alostomus maculates). Nexus F100 Housing + 105mm + 1 strobe Sea&Sea YS-120 Duo + 1 strobe Sea&Sea YS60N both on TTL. 1/60@ f22. Velvia 50.

gelid waters of Greenland to Silver Banks, near Grand Turk. Many people from different parts of the world come for the chance to dive and photograph these spectacular cetaceans in their natural habitat.

Macro point of view

At this point it could sound ludicrous to leave the wide angle lens behind, but believe me, it is at times a wise decision. The waters around these islands also harbor large quantities of corals and invertebrate species. The reefs which surround West Caicos and French Key contain colorful varieties of sponges, sea fans, giant elephant ear sponges, impressive stands of pillar and elkhorn coral, dramatic gorgonian fans, barrel sponges, diverse reef fishes and a range of exotically shaped invertebrates.

Spotted Drum Juvenile (equetus punctatus) a magnificent subject to test the uw photographers' patience. This fish moves very fast in front of the lens making auto focus goes crazy. Using pre set manual focus is a good decision. Nexus F100 Housing + 105 mm + + 1 strobe Sea&Sea YS-120 Duo + 1 strobe Sea&Sea YS60N both on TTL. 1/200@ f22. Velvia 50.

The brand new Turks and Caicos Aggressor II vessel. Photo courtesy of Aggressor Fleet, Ltd.

The need for a lens with extreme macro capabilities becomes paramount if we wish to capture the incredible forms and chromatic expressions which seek refuge in the reef. Miniscule decorator crabs, tiny red night shrimps, long-horn nudibranchs and the spectacular juvenile spotted drum fish will all make sure we quickly finish our film stocks. Underwater night life in these waters deserves special attention and it is perhaps during these hours that most of the macro photographic activity should be performed. A careful inspection of a mere 160 square feet of reef will easily make us empty our oxygen tanks and run out of film in our cameras.

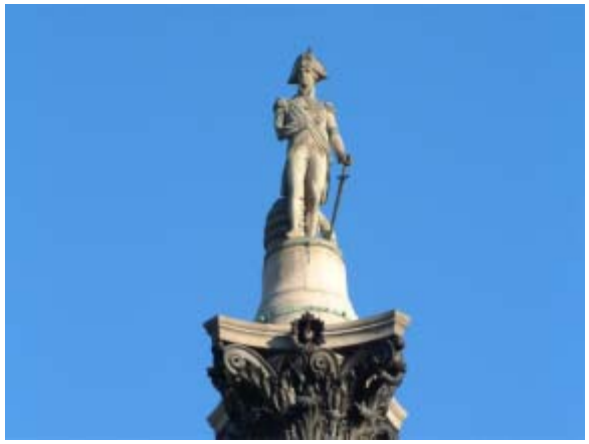
If we are interested in maximizing our time in the water in select sites when photographing an archipelago, then the best option is a live-aboard. About 20 dive operators are to be found on the Turks & Caicos mostly around Provo including an excellent live-aboard vessel: The Aggressor, perfectly fitted out for the underwater photographer.

Turks & Caicos is still relatively unspoilt. Large hotels and tourist hordes invading beaches and reefs are non-inexistent. The islands have experienced a relatively late inclusion on the international diving circuit so we can find parts of the shore which are relatively intact to this day. Let us hope that the authorities realize the value of developing careful management plans as regards tourism and take effective conservation measures for the reefs.

As a farewell note, I just have to remind the reader that the magnificent diversity to be found in the seas of the Turk & Caicos alone, will not guide us to that desired sense of anguish. To get there, we literally need the assistance of an excellent dive operator who will conduct us to the special sites, those which house the treasures of marine life and the wonders of the underwater landscape.

Bernardo Sambra
www.bernardosambra.com

What links these sites?



OCEAN LEISURE

London's premier watersports centre
11 - 14 Northumberland Avenue,
London, WC2N 5AQ
Tel: 020 7930 5050 Fax: 020 7930 3032
email:info@oceanleisure.co.uk
www.oceanleisure.co.uk

Telephoto

By Alexander Mustard

My set-up for the telephoto photography underwater. Note how the strobes are as far out from the lens as possible and pushed forwards towards the subject.

Water ruins more underwater pictures than anything else. It saps colour, mucks up clarity and drops contrast. The key to successful underwater photography is to get rid of the water! The best quality underwater images are produced when we keep the distance between the subject and us to a minimum. As a result, we only use certain lenses: the widest lenses to photograph scenery and close focussing macro lenses to snap the little stuff. In my opinion this leads to a rather restricted view of the underwater world. Other lenses would allow us to view the underwater world with a different perspective. This article is about my attempts at using a telephoto lens underwater.

Telephoto theory

A telephoto lens is defined as a lens that incorporates a telescope, thus providing greater magnification than we can see with our eyes. Put another way a telephoto is a lens with a focal length longer than a standard lens of 50mm. On a 35mm format camera a short telephoto lens has focal length greater than 75mm, a medium telephoto greater than 135mm and a long telephoto greater than 300mm. On a cropped sensor DSLR these values would be lower (divide by approx. 1.5).

For the purposes of this article I define UW telephoto photography as using a lens with a (35mm equivalent) focal length of greater than 100mm. Many of us will already have a macro lens of this focal length, but we shoot it close to subject, usually framing a picture area (much) smaller than a postcard. Telephoto photography is different because we are much further from the subject photographing a picture area larger than 30cm (1 foot) at the point of focus. My main motivation for trying telephoto photography is to exploit the different perspective it offers. Wide angle lenses produce steepened perspective, pulling the subject forward away from the background and giving a

The narrow angle of view of a telephoto enabled me to isolate this silhouetted Anthias against the evening sunlight. Nikon D100 + 160mm (35mm equiv.), Subal housing. 1/500th @ f8. 2 x Subtrobic Alpha strobes.

shot an almost three dimensional effect. This is great. And it is one of the reasons why we like them so much underwater. But if you have ever sat through a reel of wide angle slides you will soon

Flattened perspective gives fish a flatter more human looking face, that is easier for a viewer to relate to. Nikon D100 + 160mm (35mm equiv.), Subal housing. 1/180th @ f16. 2 x Subtrobic Alpha strobes.

realise that the effect is used repetitively in underwater photography. A long focal length shows less background and flattens perspective, pulling the background much closer to the subject. While less

The telephoto allowed me to photograph this difficult to approach Mantis shrimp at a long camera to subject distance. Nikon D100 + 160mm (35mm equiv.), Subal housing. 1/180th @ f22. 2 x Subtrobic Alpha strobes.

suitable for many underwater situations if used selectively it can create stunning images that add a spark of originality to a portfolio.

Telephoto technique

Well, that is the theory. It is rather more difficult in practice. The first problem with a lens designed to "bring distant objects into closer view" is that by shooting through lots of water the image will loose the three Cs: colour, contrast and clarity. Lighting the picture with flash is part of the solution, but also creates the additional problem of backscatter. All that water filled with plankton, sediment and other particles provides plenty of potential to create a snowstorm image. The final problem is that many telephoto lenses have minimum focus distances greater than several metres. It is important to choose a lens that can focus down to at least 1 metre (3 feet) for underwater use, as 1-2 metres is the typical range for underwater telephoto.

There are several schools of thought for lighting underwater images with strobes. In my opinion there are no hard and fast rules because what works artistically and what doesn't is to great extent subjective. Lighting techniques can also vary with visibility. Here, I will just describe the approach I use and discuss why I think it is successful and how I modified it for telephoto. Invariably I use my strobes as a pair, positioned either side of the lens pointing directly forward, or angled slightly inward. I find that this approach provides the nice even light that I like, and also makes my camera rig easy to handle. I adjust the distance between the strobes and the camera lens depending on how far from the subject I am, pretty much irrespective of what lens I am using. For close-focus-wide-angle and macro my strobes are packed in close to the lens. When I shoot fish with a

standard lens or sharks (or other large creatures) with a wide angle my strobes migrate much further out. For telephoto I have the strobes as far out as I can. I also push them forward, closer to the subject than the lens, and angle them in slightly so that the centre of the beams crosses about 1.5 metres in front of the camera.

This lighting setup solves colour and helps contrast a lot, without creating a blizzard. Although to some extent that will depend on the visibility because backscatter will increase as visibility decreases. The lowest visibility water I have so far tried telephoto in was about 8 metres in Lembeh. Hardly atrocious viz, but the images were as clean as a whistle!

Clear water really helps overcome problems of image clarity in telephoto shooting. I have found that the old rule of fin that visibility must be at least 5 times your camera to subject to distance is a good guide (2 metres camera to subject needs 10m Viz). The other way to increase the apparent clarity of an image is to choose a higher contrast film. This is particularly easy with a digital camera as the contrast of the "film" can be adjusted during the dive, or even after the dive if we shoot RAW.

Exploiting telephoto

OK, so we have a technique that works with a telephoto lens. How can create new and eye-catching images that exploit the characteristics of the lens?

Here are a few of the things I have tried.

The factor that first made me try a telephoto was the chance to photograph fish behaviour that is hard to approach. When I have dived with

With a commonly photographed subject like a coral trout grouper, a telephoto is one way to produce a shot with a different loook. Nikon D100 + 160mm (35mm equiv.), Subal housing. 1/45th @ f13. 2 x Subtrobic Alpha strobes.

videographers I have always been jealous of the behavioural sequences that they have captured.

One of the reasons they are able to get such great shots (in addition to their skill, of course) is

A telephoto lens flattens perspective, shorting the distance between the background (in this case a wall of fish) and the main subject. Nikon D100 + 160mm (35mm or digital full frame equivalent), Subal housing. 1/45th @ f13. 2 x Subtrobic Alpha strobes.

that they often film the action from more than 1 metre from the subject. At this distance they still get good frame filling images and at the same time do

The difficulty with photographing this saddleback anemonefish being cleaned by a shrimp living in its anemone was if I got too close to the fish would come charging of its anemone and attack me. The long lens allowed me to get the shot without disturbing the natural behaviour. Nikon D100 + 160mm (35mm equiv.), Subal housing. 1/180th @ f11. 2 x Subtrobic Alpha strobes.

not disturb the natural behaviour. A telephoto provides the still photographer the same opportunity.

From a photographic point of view my favourite use for a telephoto is to flatten perspective. I can use this effect to my advantage both on the main subject and the background. Compared with us humans, fish have long and pointy faces. If we photograph a fish head-on with a wide angle or standard lens their face is distorted. Furthermore, the mouth usually is out of focus if the eyes are sharp.

The telephoto perspective flattens fish faces making them appear more human and arguably more familiar and pleasing for the viewer. A telephoto also pulls the background of the image closer to the main subject. This lets us draw attention to background details that would be lost in a wide angle photograph. For example, the long lens helped to emphasise the wall of fish behind the main grumpy looking snapper.

The narrow angle of coverage of a telephoto is also very helpful for isolating a subject against a particular background. This allows us to create simple images of subject on an uncluttered background of our choice. The backlit Anthias photo is an example of this. The evening sun was creating beautiful patterns on the surface that I wanted to use a background. The narrow angle of coverage let me completely fill the background of the frame with these patterns.

Finally the shallower depth of field, from a given camera to subject distance, of a telephoto lens can be used creatively to draw the eye to the main subject and to give the image more impact. Narrow depth of field can be accentuated by using wider apertures, that also help account for the long flash to subject distances. But it is important to remember that a narrow depth of field does not mean that the background of the image does not contribute the story that the image is telling.

Conclusion

My main fear when first trying this technique was that other photographers would laugh at my inability to get close to a subject! "Who is that idiot photographing fish from more than a metre away? Doesn't he know the basic rules of underwater photography? There is no chance his pictures will come out."

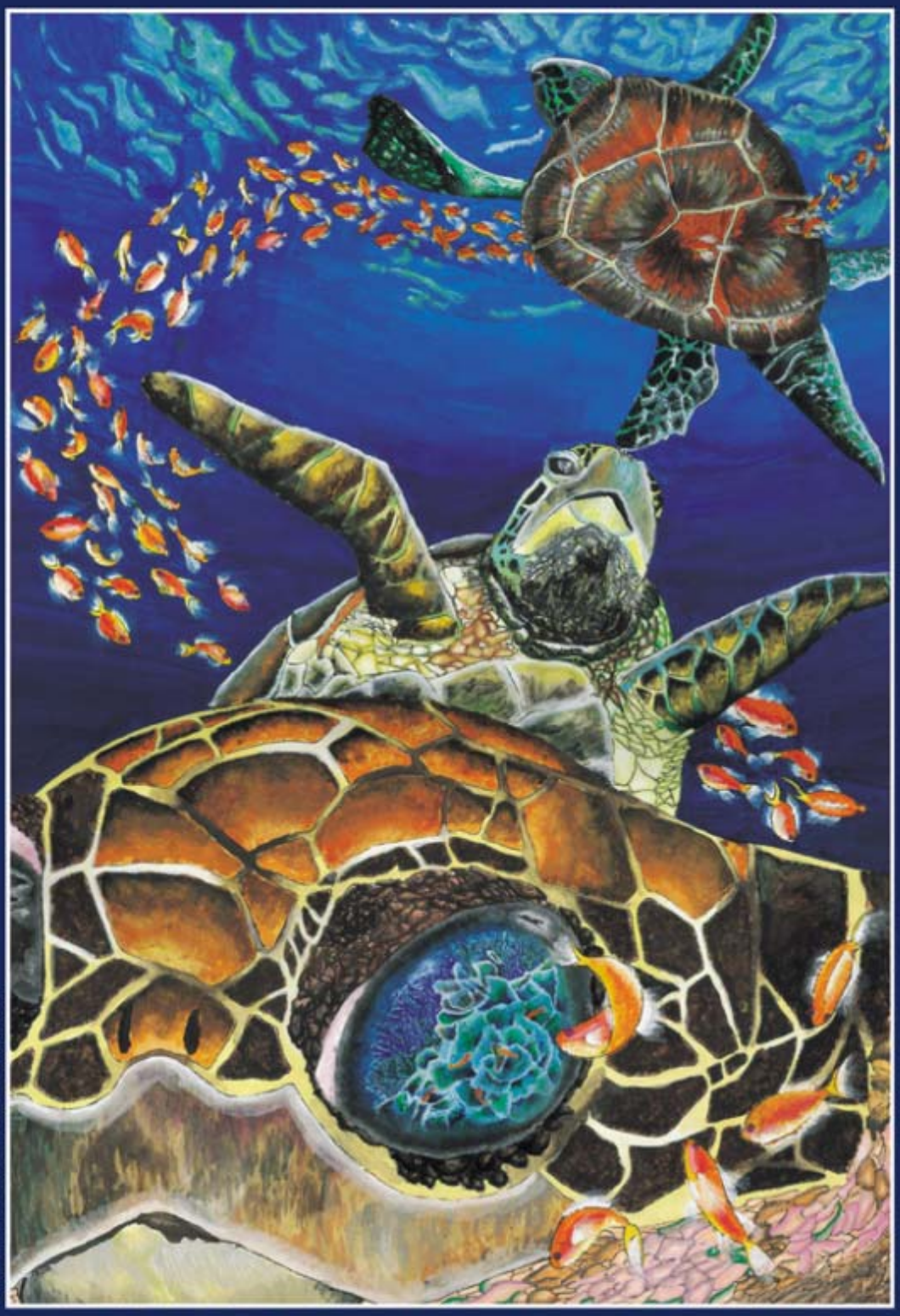
Etc. Indeed I had scared myself off underwater telephoto photography until I could try it with the comfort blanket of immediate image review that comes with a digital camera!

Thinking about it, we probably take 90% of our images from between just under a foot to slightly less than two feet (20-50cm) from the subject. To get a different view, we don't move we just change lens. By using just a few lenses from pretty much the same position relative to the subject, we are severely limiting the types of images we can produce. The telephoto encourages us to try something different, to back away, and get a new perspective on the subject. I say let them laugh.

Alexander Mustard
alex@amustard.com
www.amustard.com

Alex will be giving a digital presentation at Visions in the Sea on October 23rd in London

31e FESTIVAL MONDIAL DE L'IMAGE SOUS-MARINE



Oeuvre de Asuna Okajima, 14 ans (Nagoya, Japon)

ANTIBES JUAN-LES-PINS

27 au 31 octobre 2004

PALAIS DES CONGRÈS

SOUS LE PATRONAGE DE JEAN LÉONETTI, DÉPUTÉ-MAIRE D'ANTIBES

Région PACA

CONSEIL GÉNÉRAL DES ALPES-MARITIMES

RTL2 92.8

TMC MONTE CARLO

NAUSICAÄ Centre National de la Mer Boulogne/Mer

INSTITUT OCÉANOGRAPHIQUE PAUL RICARD

UNESCO

Festival : 62, avenue des Pins du Cap - 06160 Antibes Juan-les-Pins. France. Tél +33 (0)4 93 61 45 45 - Fax +33 (0)4 93 67 34 93
spondyle@underwater-festival.com - http://www.underwater-festival.com

Eumig Nautica

By Steve Warren

It was the films produced by Cousteau and Hass that inspired the diving movement of the 1950s. Throughout the sixties and seventies movie theatres and television audiences were fed an unrelenting diet of underwater documentaries, drama and science fiction

Naturally the thoughts of sportdivers turned to making their own underwater movies. Early equipment was largely homemade, although a few companies such as the Swiss firm Bolex, Germany's Bauer, the Japanese company Fujica and , perhaps surprisingly, the Soviets all produced movie camera and housing packages. But it would fall to an Austrian design team to produce the Worlds first and only underwater amateur movie camera.

Eumig cine cameras were already a firm favourite with amateur underwater movie makers. Soon after Super 8 film was launched in the mid sixties, Eumig teamed up with Rene Hugenshmidt to offer the Eumig/Hugyphot Submarine. The aluminium housing was custom built around the Vienette cameras and is one of the most recognisable movie housings to a collector. But the Nautica itself really had its genesis in 1974, when the Eumig Mini 3 Servofocus camera appeared. The Mini 3 was a budget camera aimed at the movie maker who largely wanted to shoot family events and holidays. The compact, frill free camera boasted auto exposure and had a 9-30mm f1.9 zoom lens. Eumig used a hyperfocal focusing system. Essentially the lens was fixed focus for somewhere in the middle distance and relied on depth of field to keep foreground to infinity acceptably sharp. In good light, on the widest setting focus stretched from as little as 2ft /0.5m to infinity.

Interestingly this simplified focusing system is in some ways preferable to the more modern electronic auto focus. Autofocus tends to hunt if something unexpectedly enters the frame and as the camera pans between subjects, which is distracting. Servofocus eliminated that.

The point and shoot qualities of the Mini 3 immidiately attracted the attention of housing manufacturers. With the camera set to wide angle, the only control needed was the shutter release. Until the arrival of the Mini 3 housings tended to be built sporadically. The choice of cine cameras was overwhelming. They ranged from top of the line Nikons, Elmos, Beaulieus and Canons aimed at the very serious film maker willing to invest hundreds of pounds to fixed lens models for the budget family snapper from GAF, Kodak and Halina. It made it hard to settle on a particular model that could appeal to a large part of the diving cine market and encourage divers who weren't into photography to give it a go. The Mini 3 met that need. Soon dedicated housings began to appear from brands like Birchley Products, Promoacean and Ikelite, Even Italian diving equipment specialists Technisub produced a housing as did British company Submarine Products, which was later marketed by Roy Midwinter under his Aquasnap label.

Like many modern video and digital stills cameras, Super 8 cameras were flawed in one major respect. They offered very modest wide angle capability. All the development was on increasing the telephoto end of the lens. Even the best cameras had wide angles little better than those found on a 35mm compact.

1976 saw Eumig address that issue. The Panarama Macro Aspheric (PMA) arrived on the scene with Eumigs high end 860 and 880 cameras. This simple conversion lens screwed into the existing zoom to increase the wide angle from 8mm to just 4. With it you could have sharp, focus free

images from a few centimetres away to infinity. An added bonus for filmakers working without tripods was that it made camera movements appear more fluid and less jarring, so it was easier on the eye as the camera tracked.

In 1977, the year The Deep hit the movie screen, Eumig updated the Mini 3 to include the PMA. With this simple addition, the Mini 3 became the near perfect solution for amateur underwater filming. It was a concept not lost on the Wizards of Vienna....

Lets backtrack slightly. A quarter century ago, the only underwater stills camera that merited serious respect was the Nikonos 111. It alone offered a wide choice of shutter speeds and apertures. It was non reflex. There was no built in light meter. You wound it on yourself.

It was state of the art.

Other underwater cameras were much more basic. Crude is the word I'm searching for. Cameras like the Gagy Anfibian, Nemrod Siluro and Spirotechnique Aquamatic offered little exposure control and were restricted to a standard lens with some limited close up options. The stills photographer seemingly battled against his equipment to get images. Filmakers, on the other hand, were about to be treated.

The Eumig Nautica premiered in 1979. Little larger than the Mini 3 Servofocus that begat it, it was a scene stealer at every photographic show. Peter Scoones tested it for Amateur Photographer, Mike Busutilli raved about it in Diver and Tony Sopher took it diving on the TV show Blue Peter.

Eumig beefed up the outside of the camera and added a stippled finish that imbued a military look. The grip was enlarged and had two useful features added - a swing out storage bay for the PMA and a wrist strap designed to let you accurately measure off the filming distance for shooting macro. The macro filming was a by product of the PMA adapter. To focus on the image created by the aspheric wide angle, Eumig had to provide focusing down to just a few centimetres. An external lever ensured you didn't enter the macro zone accidentally and a warning light was a bold reminder in the viewfinder that you were set for macro/PMA use. The Nautica had an excellent CDS exposure meter positioned above the lens which rarely got it wrong.

Compared to the Mini 3 minor changes were made to the control layout. Most super 8 film is designed for use with artifical light. A filter is built into the camera to correct the film for daylight shooting. Many cameras used a key or the foot of a cine light mount to switch the filter in and out. On the Nautica it's a slider inside the film chamber. Choosing betwen normal filming and single frame for animation is done by screwing a cable release into the appropriate hole in the trigger on the Mini 3. It's an external knob on the Nautica. A flourescent film counter made it easy to read off your remaining film stock. And the Nautica had a unique feature. To ensure you didn't drop below it's maximum operating depth of (allegedly) 40 metres, a simple capillary depth gauge was built into the door lock. That some Nauticas certainly found themselves working at 60 metres plus is common knowledge.

What's the Nautica like to use? It's a breeze. A low volume mask gives easy edge to edge viewing, once the eyecup is removed. The viewfinder is clear. The lights to indicate that you are set to macro and to confirm the film is running through the camera are placed outside your view of your subject. A red flag slides into the viewfinder to warn of underexposure and a black pointer lets you know you've turned on the backlight control. Deliberately

making these warnings obtrusive ensures you don't foul up your shots through exposure problems. The frame finder was something I abandoned almost immediately.

The wide angle served me well for most subjects that I wanted to film. Shooting macro was convenient and easy. The cameras is slightly negative (it's shown floating in the ads).

Eumig went out of business in the mid 1980s. Demand for cine cameras had been dropping steadily and an emerging medium - amateur video - was a threat about to be realised. Eumig had taken a knock from the canceling of the Polavision project (instant developing movie film for which Eumig provided cameras and viewers to Polaroid), and took a further knock when they tried to enter the video market and got it wrong.

At the time the Eumig Nautica was nearing the end of its life, Sony launched their first Marine Pack. Housing a shoulder mounted amateur camera and a full size home video deck, it weighed in at 45 kg. That's about the weight of 50 Nauticas.

Today video dominates underwater film making. But super 8 is enjoyinmg a resurgence amongst young trendy professionals. They use it increasingly for making pop videos to get the grainy look.

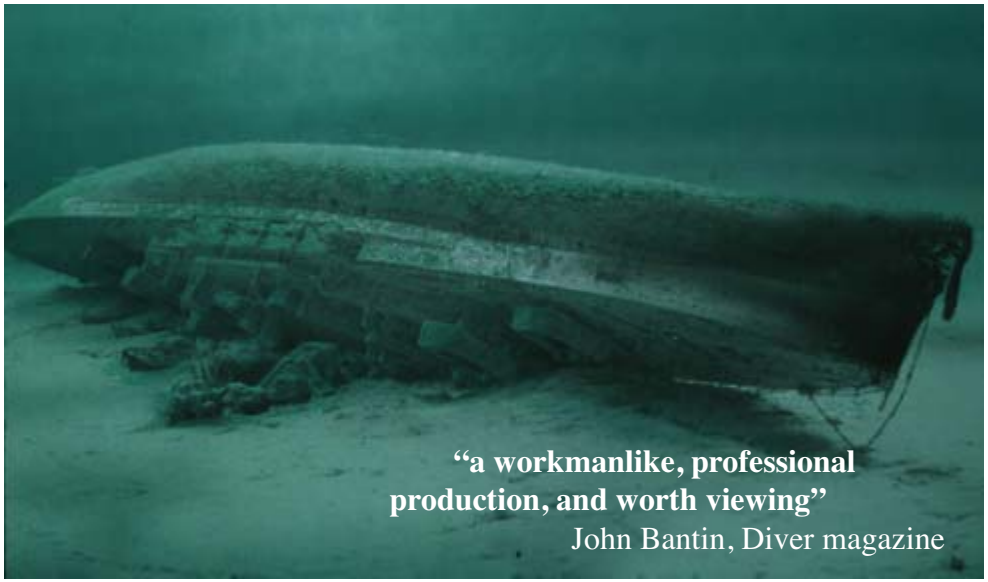
There are three models of Nauticas for the collector. Eumig supplied them originally with a framefinder of perspex with the grid etched on. Later this was changed to the open sight - possibly to reduce drag and avoid scratching. The third version is a modification carrried out for Helix of Chicago. Super 8 cameras normally ran at 18 frames per second. This is fine for visuals, but not so good for recording and playing back sound. Although the Nautica was mute - it didn't record sound - it was possible to have a sound track added to silent film later or use Agfa Moviechrome Plus film which already had a sound stripe. During post production effects, narration and music could be added. To improve sound quality, Helix had some of their Nauticas adjusted to run at 24frames per second.

Nauticas are regularly seen in secondhand camera shops and on E bay. A nice one should cost no more than a hundred pounds.

Steve Warren

optics@oceanoptics.co.uk

HMS Royal Oak video



The wreck of HMS Royal Oak in Scapa Flow is a designated war grave and all diving is prohibited but in 2000 a special permission was granted for the wreck to be filmed as a moving tribute to all those who lost their lives.

"I ordered the video and it arrived last Monday. I've only had a chance to view it today. I was so profoundly moved (and I am a hard bitten first world war historian) that I had to email you.
I was impressed with virtually all aspects. I thought the balance between interviewees, diving footage and historical context was spot on. This is something not always achieved in documentaries - I know because I used to make them. The interviews with the survivors threw the whole affair into stark relief. I cannot praise this video highly enough. And I thank you for your web site."
Warm regards, Pamela Armstrong
Running time 50 minutes. Narrated by Tom Fleming. Produced by Ocean Optics Ltd. Directed by Peter Rowlands

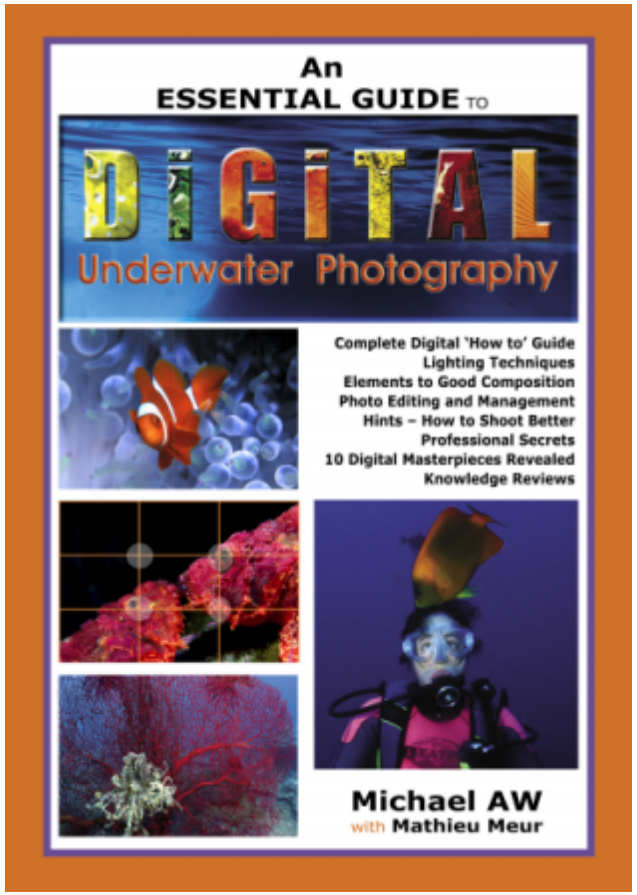
The video costs £16.95 (+£2.50 UK postage). Total £19.45. Please send cheques payable to PR Productions and send them to: Royal Oak Video, 13 Langley Avenue, Surbiton, Surrey KT6 6QN. Credit card tel & fax 020 8399 5709

Book reviews

An Essential Guide to Digital Underwater Photography

by Michael Aw and Mathieu Meur

Release date 5 Aug 2004



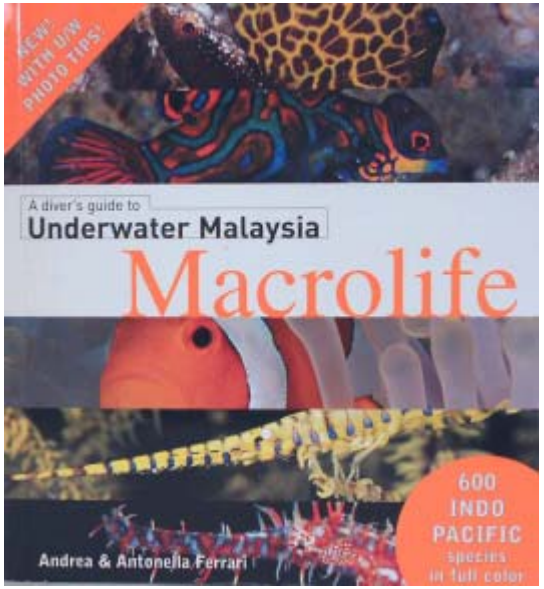
This book promises to be an absolutely Essential Guide for those who want to shoot beautiful digital pictures underwater. The modules are well thought-out giving detailed descriptions and explanations about using digital cameras underwater, exposure, use of light and shooting techniques for macro and wide-angle imagery. Includes tutorials on photo editing, colour correction and file management. A generous number of colourful graphics and photographs are used to illustrate the techniques and key points of underwater photography. This guide shares with you the fine art of composition and other secrets for taking great underwater photographs.

An Essential Guide to Digital Underwater Photography will cost USD 20 plus shipping and there will be a full review in UwP21.

Details of the contents are at www.oceanearthpictures.oneocean.com/contentpage.htm

A diver's guide to Underwater Malaysia Macrolife

by Andrea & Antonella Ferrari



A diver's guide to Underwater Malaysia Macrolife is quite simply a 'must have' book for any underwater photographer visiting this area which abounds with prolific subject to photograph.

600 species are covered with really excellent identification photographs and informative text including distribution, size, habitat and habits but what sets this book apart for underwater photographers is that there are useful u/w photo tips for each subject. I was expecting these to become very repetitive after a while but in truth they are varied, very useful and impart a great deal of the authors obvious knowledge and considerable photographic skills.

A diver's guide to Underwater Malaysia Macrolife is published by Nautilus Publishing (nautiluspub@tin.it) and costs £29.95 in the UK where it is available from Ocean Optics.

www.oceanoptics.co.uk

Peter Rowlands

peter@uwpmag.com

Guidelines for contributors

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

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

Uw photo techniques - Balanced light, composition, etc

Locations - Photo friendly dive sites, countries or liveaboards

Subjects - Anything from whale sharks to nudibranchs in full detail

Equipment reviews - Detailed appraisals of the latest equipment

Personalities - Interviews/features about leading underwater photographers

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

How to submit articles

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

1. The text should be saved as a TEXT file and attached to the e mail
2. Images must be attached to the e mail and they need to be 144dpi

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

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

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

Classifieds

FOR SALE

SAVE over £1600!

Subal D10 housing and Nikon D100 digital SLR camera in mint condition complete with leak detector and twin flash sockets. (Port not included).

Housing and camera just £1950.

For further details contact Peter Rowlands.

E mail peter@uwpmag.com

For sale

SUBAL N10 housing for NIKON F100. SUBAL fisheye dome port. NIKON F100 body. NIKON 16mm fisheye lens. Extension rings for 17-35mm and 14mm. Zoom gear, leak detector, caps, extra O-rings, etc. Excellent condition - hardly used, less than 20 dives!
All for £2000. Contact Olaf Veltman (NL) +31 50 5014388 or e-mail olaf@olaf-veltman.com

For sale

Ikelite Case for Nikon F80, SLR Dome Port F/3" lens, Flat Port F/ 3.5"-4.5" lens, Ikelite Dome Port F/ 3"-4" lens, Ikelite Substrobe 200 (Euro, with Smart charger), macro grip arm, quick grip arm II, Ikelite Photocase plus Hoya 52 close up set. all in excellent state, as new.
Price asked: £800
I can sell also, separately, a Nikon F80S with 3 lenses, all in excellent state.
Contact Gonzalo de Carvalho
email:
g_de_carvalho@hotmail.com or goncalo.de.carvalho@bbc.co.uk (after 15th August)
Mobile: 07792594441 (after 15th August)

For sale.

Underwater camera housing system based around a F90 SUBAL housing. Includes port for Nikkor AF105/2.8 lens, focusing lights, strobe arms, clamps, case, etc. Asking 800 pounds.

Nikonos SB 104 strobe, very good condition (with spare battery). Asking 400 pounds.

Nikon LS-30 slide/film scanner with interface card, asking 250 pounds.

Contact by email: mcshearwood@ntu.edu.sg

WANTED

U/W Photo Instructor for busy UW Photo Centre in the Cayman Islands. Must be certified instructor with photo experience. Email for details. Cathy@cathychurch.com

New: Carbon fibre housings

Mediasub is specialized in distribution of products especially designed for the catch of underwater sights. Our products headlights are the Bruder carbon fibre housings for cameras and video cameras.
An excellent ratio price quality:

Mediasub: 7, route de Schaeffersheim F/ 67150 Erstein, Phone: 0033388982039 www.mediasub.com

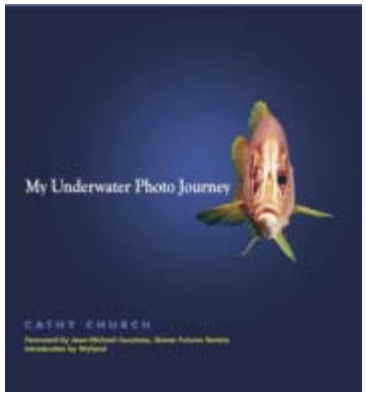
Martin Edge 'Digital or Film' Underwater Photo-Courses 2004

11/12th Sept 04 - Composition
25/26th Sept 04 - Composition
13/14th Nov 04 – Digital or film
27/28th Nov 04 - Digital or film

Ideal for those who have updated to digital. Small groups. Two days of full tuition. E6 Slide film processing. Indoor (heated) swimming pool photo exercises. Own camera equipment is preferable however hire facilities available. Two nights bed and breakfast in a Bournemouth hotel. Cost of Course £185. Accommodation is not included in this price. One to One instruction also now available

Contact Martin or Sylvia on 01202 887611 or E-mail at Martin.Edge@btinternet.com

My Underwater Photo Journey



Cathy Church's NEW UW coffee table book "My Underwater Photo Journey".144 pages; download a free photo lesson for each image. Only US$39.95 plus $8.00 shipping & handling. Avail. mid Sept. cathy@cathychurch.com, or mail US check to Cathy, P.O. Box 479 GT, Grand Cayman, Cayman Islands, specify recipient name for autograph.

www.underseacameras.com

SEACAM

New Sales
Used Sales
Workshops
Courses
Servicing
Repairs
& More

Professional quality housings for:
Canon EOS1D/1DS/1D MKII, Nikon D1/D1X/D1H, Fuji S2Pro and film cameras.

UK/Ireland

info@underseacameras.com
01248 681361 or 07702 411614

For sale

Subal F90 MkII (for Nikon F90x) Absolutely Mint Condition, Used 3 Times, Includes Peli Case. £850.00. Phone: 0207 431 5414. Email: dave@kelvinmurray.com

Parting shot

This certainly was not a champagne moment. I was in the Isles of Scilly channel that separates the islands Bryher and Tresco, trying to get under the sea swell. But at a depth of 25m I could still feel the swell and swaying in front of my eyes was my Cobra 440 – my land flash gun liberated from its underwater housing.

Shock and horror gave way to total denial. I reached for the flash gun and put it back in its Perspex housing and pressed the shutter a couple of times. No flash.

Reality returned. The first day of a diving holiday and no back-up and little likelihood that the one camera shop on the Isles of Scilly would have anything remotely like the flashgun I had taken for a very wet dive. "Drowned is it. Cant you revive it with a bit of artificial respiration?" quipped one of the non diving photographers when I got back into the boat.

I looked at the dripping flash gun and had a Eureka moment. Back into the seawater went the gun.

Some of BSoUP's seven rules for drowned cameras had surfaced in my mind. First was "Don't panic! Second was "Immerse in fresh water and keep in housing if housing will hold water".

Well I had no fresh water so sea water would have to do. Once back on the main island - St Mary's - I could effect the third most important rule: "Dunk in methylated spirits".

"Got to keep the air away from the gun," I explained to my bemused buddies.

My reputation (such as it was) was plummeting. On St Mary's I traipsed around the shops with my flash gun in water asking for meths! And my popularity (well we do delude ourselves) took a nose dive at the guest house. I headed straight for the bathroom and rinsed the gun several times in fresh water, immersed it in meths and then left it on top of a bedside table lamp to dry out. The heat from the lamp – I thought- would do the trick. It did but it also stank out the guest house.

Would my sacrifices be worth it? The following morning armed with fresh batteries I switched the gun on. It briefly whirred and then fell silent. I didn' t give up. Out came the batteries. I shook the gun and replaced it on top of the table lamp. Over the next couple of hours I repeated the process of shaking and warming several times. Finally the red light came back on. I pressed the shutter.

Cobra 440 flash gun on TTL in home-made underwater Perspex housing; Nikon 801 in home-made Perspex housing. Nikkor 60mm macro lens. Velvia 50. Manual on 1/60th at f8.

Eureka. It flashed followed by a green light. Not only was it working manually, but also on TTL.

Incredibly the gun worked flawlessly on TTL throughout the diving holiday and helped capture this image and many others.

So remember if you are in a tight spot don't panic and don't forget the meths!

Tony Sutton
tsu7777@aol.com

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