



By Jason Heller
& Dan Beecham

Photography



GUNILD PAK SYMES



Reef Hook

Carabiner

D-Ring

Underwater photography requires more than your basic dive gear and cameras. Sometimes it's the often overlooked accessories and customized set ups that help you safely and conveniently capture the shot in difficult or unexpected conditions.

Some accessories simply make your life a little easier, while others help you avoid ditching your camera in an emergency. Most accessories are relatively inexpensive and readily available at any photo or dive shop and online. The following are items that we can't live without.

Reef hook

Anticipated or unexpected currents can create conditions that are difficult to shoot in. Plan to bring a reef hook along in order to hook into a "dead" piece of rock and stabilize yourself in order to shoot the action. Some destinations have constant currents such as the Galapagos for example. Usually the best pelagic and schooling action is found in areas with

fairly strong currents, so a reef hook can be the difference between capturing the shot and holding on for dear life. Reef hooks can be purchased at dive shops, or you can make your own with simple items available at any hardware store.

BC with D-rings

Be sure to use a BC with enough d-rings to support clipping multiple items to yourself.

Clipping cameras, torches, slates or other items to your BC when not in use is the most convenient way to keep your hands free to shoot or to hang on when needed (or when you forget your reef hook!).

Clips & Carabiners

Double sided carabiners with quick release plastic clips can be invaluable, particularly for those who dive with more

than one camera, or for use during stops or long swims. One side of the clip should be attached to a d-ring on your BC, while the other side is attached to the camera housing. When doing a deco or safety stop, your camera can be quickly and safely attached to your BC in a streamlined fashion, keeping your hands free for an added margin of safety and energy savings. Note: keep your camera and

Rigging Your Gear

for Convenient and Safe Underwater Photography



photography



Surgical tubing

strobes on while clipped to your BC. The quick release clips can easily be unlocked when an interesting subject comes into view so that you can capture the shot.

Wireless air integrated computer

A wrist mounted, wireless, air integrated computer gives you all the information you need in one place. The most convenient part is that the computer is close by your camera, so taking your eyes away from your viewfinder and shifting a few degrees to look at all of your vital dive information can't get easier. A small back up gauge is certainly recommended, although it is very rare that the wireless device will fail. Redundancy however is the best policy when it comes to life support systems. Stuff the back up gauge in your BC pocket to keep a streamlined profile.

water to shoot both macro and wide angle. SLR users do not have such an option. When shooting with an SLR, you must first decide on a macro or wide angle set up before getting wet. For macro shooting, the most common options are a 60mm or 105mm lens. Carrying an external diopter that fits over your lens port can effectively help to increase the versatility of what you are able to shoot with any given set up. There are just a few manufacturers that provide these external diopters, and they range from 20% magnification to +2 magnification. Some of the diopters are made to be mounted to the camera port while others are made with a soft skirt that fits snugly around the port. In the latter case, a neoprene pouch clipped to your camera housing or BC will come in handy to prevent losing the diopter.

Surgical tubing

Does carrying your camera from your hotel room to the boat get a little uncomfortable at times? Do you get concerned when handling your housed SLR system from the water up to the boat staff at the end of the dive? Surgical tubing may provide the solution. The material is very durable and when doubled up and secured to your camera arms or handles, can make a great shoulder harness or handle for your camera system. You can buy surgical tubing in most well stocked dive shops and it usually comes in the standard latex color or in black.

Black skirt mask

Many photographers prefer to dive with masks that have a black skirt.

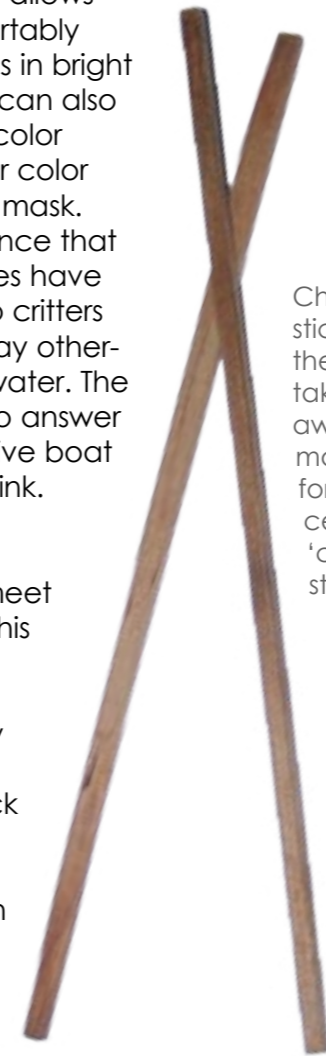


WWW.TUSA.COM

This reduces the ambient light that enters the viewfinder and allows you to shoot more comfortably without straining your eyes in bright conditions. However, this can also be augmented by using color enhancing (preferable) or color correcting lenses on your mask. You will notice the difference that the color enhancing lenses have when scanning for macro critters or other scenarios that may otherwise lack contrast underwater. The only downside is having to answer all the questions on the dive boat about why your mask is pink.

Critter stick

This point will most likely meet with some criticism, and this is not meant in any way to condone harassing or abusing marine life. Many photographers find that bringing along a chopstick or other small stick (with rounded edges as to not harm any marine life) can come in handy when shooting macro among hydroids, swaying corals or seagrass, or to gently persuade shrimp



Chop sticks from the local take-away make for excellent 'critter sticks'

or other creatures to come out from their hiding places. Apparently, a radio antenna with a red tip will provoke pistol shrimp to reach out or attack the red tip, allowing for a good image. When using a critter stick – always, always, always respect the marine life. This is not a tool to be used to harass or abuse the beautiful and delicate wildlife and should be used with the utmost of care.

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WOODY MAYHEW



External diopter

Those who shoot with compact cameras have a slew of options for interchangeable lens accessories that can be swapped while underwater. This offers compact shooters the ability to take one camera under-

External diopter

WETPIXEL.COM
digital imaging for divers



When using a critter stick
— always, always, always
respect the marine life.

Cable ties

Between your dive, photo and travel gear, cable ties can come in handy for so many purposes, we could dedicate an entire article to the subject. Regarding photo gear specifically, cable ties can be used to attach items to one another or to yourself. Diffusers can be secured to your strobes, external diopters attached to camera housings, aiming lights to camera arms, and of course any other accessory secured to anywhere convenient. Black ties can be used and barely noticed anywhere on your gear, while brightly colored ties are handy for extra security on photo cases or luggage when traveling.



SMB

Safety first. Too many photographers forget this, and think that because they've got a camera in their hands they're invulnerable. It can often be difficult to inflate your SMB when you've got your hands full of cameras. With this in mind, photographer Steven Frink developed an SMB that is easily deployed even with two cameras in your hands. Aqualung licensed Frink's design and it is now marketed as their SOS system. The SOS is easily inflated with one hand by tugging on the release cord located where a rear dump valve would normally be found, and then by inflating the BCD as normal with the low-pressure inflator.

Closed Circuit Rebreathers and Twin Hose Regulators

The ability to get closer to marine life provides obvious advantages to underwater photographers. Many creatures, including several species of shark tend to head down to the depths when divers on scuba invade a reef; but will tolerate the presence of divers on closed circuit rebreathers. Along with making you silent underwater, CCR's make the characteristics of your buoyancy much more appropriate for underwater photography.

CCR's are becoming more readily available to recreational divers every season. The gear is getting cheaper and safer. But for the time being, they do not appeal to the majority of divers. A popular alternative for many divers is a twin hose regulator. With a twin hose your regulator, the second stage, is located alongside the first stage—meaning a small amount of exhaust bubbles comes out at the back of your head rather than in front of

you, close to your subject. At present, the Aqualung Mistral is the only twin hose regulator currently in production.

There are obviously many other ways to customize your camera and dive gear. We have outlined only the top items that we personally bring along to make our lives easier. Some of these recommendations have been passed down from photographer to photographer, while others are our personal preferences. We hope that the outlined recommendations will help you add a margin of safety and convenience to your underwater shooting. ■

Magic Filters

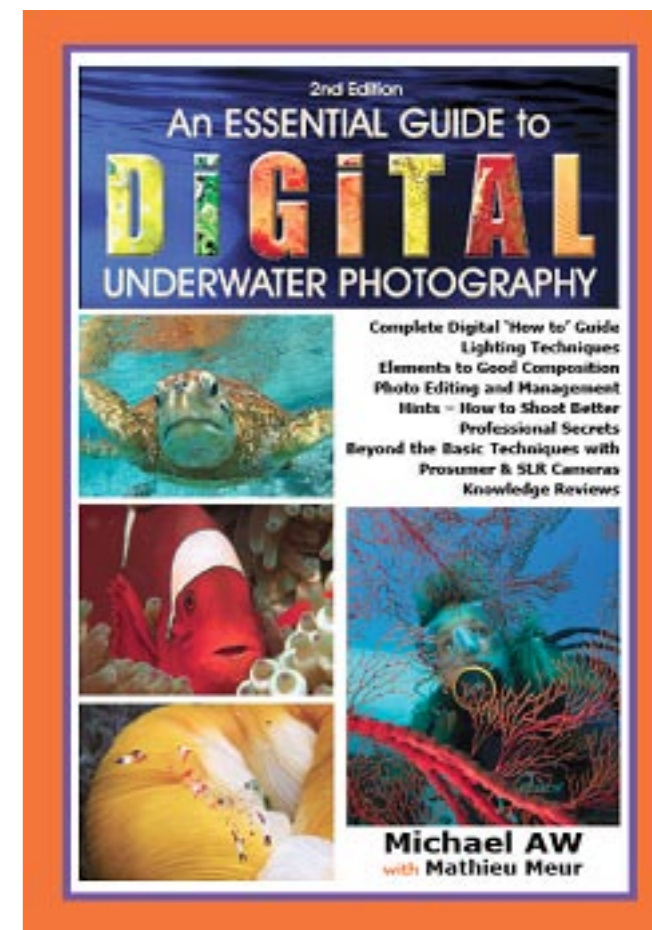
by Jason Heller

Magic filters, developed by marine biologist and underwater photographer Alex Mustard and marketed together with Peter Rowlands of UWP Mag, hit the market last year and have quickly become a staple in the accessory bins of photographers worldwide. The filters only work with digital cameras. The gel filter sits in the bayonet behind the lens

as opposed to a screw on front mounted filter. The basic premise behind the filters is that they work with the white balance of your digital camera to allow for colorful ambient light images at depths beyond that of normal filters. To enable them to work properly, the white balance must be adjusted every few meters, but what a difference they make. I tested the filters with a 10.5mm lens on a D100 camera on the *Liberty* wreck in Bali earlier this year and

was very pleased with the results. The increase in depth of field gave me the ability to shoot the entire wreck, at depths south of 50 feet. These images would not be possible with strobes nor with traditional filters. In shallow water, the filters bring out the vivid colors of the reef and its inhabitants. I look forward to more shooting with my magic filters and definitely recommend picking up a set and seeing what they can do. ■

www.magic-filters.com



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A well-structured, comprehensive work, lavishly supported with explanatory diagrams and magnificent images the, *Essential Guide To Digital Underwater Photography* will undoubtedly prove to be as much an educational tool for novices as it will a reference work for those with greater proficiency in underwater image making.

— "David Strike" Editor NEKTON



JASON HELLER

REVIEW

Memory Cards: Keeping Up With Camera Performance

Lexar Media, Inc., a leader in advanced digital media and accessories, announced that it has increased the performance of its popular Professional 8GB CompactFlash® memory card to 133X. This performance improves the digital imaging workflow for both professional and advanced amateur photographers working with and managing large files. Lexar's new card is capable of a minimum sustained data write speed of 20MB per second and is currently available in CompactFlash Type I flash memory card format, the most popular format for today's digital SLR cameras. Lexar's new 133X 8GB CompactFlash will be available in August for the suggested price of \$424.99. www.lexar.com



SanDisk Extreme IV line of CompactFlash digital film cards is targeted at photographers who require the highest possible performance. Minimum read and write speeds of 40 megabytes per second makes these the fastest flash memory cards in the world. Extreme IV CF cards carry a lifetime limited warranty.



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8GB - \$639.99 / €509
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www.sandisk.com



FujiFilm Aquamask Case for FinePix A400 and A500

The 'Aquamask' housing for Fujifilm's four MegaPixel FinePix A400 and five MegaPixel FinePix A500 digital cameras is one of the few protective, waterproof casings available for entry-level digital cameras. Depth rated to a modest 10 feet and with a tough shell that can also protect the models from sand, dust and dirt, it is also ideal for a day at the beach.



Ikelite house for Olympus Stylus 810

This compact digital housing is molded of corrosion free clear polycarbonate, it is virtually indestructible with heavy duty walls that allow it to operate safely to 60m (200 feet). All functions of the camera are accessible, except the print button. A flash diffuser is included. www.ikelite.com



Sea&Sea YS-27DX

The new YS-27DX from Sea&Sea features a beam angle of 105°x84°, and a guide number of 20 meters. The guide number control function can be used to regulate the light intensity in 9 stages from 1.7 up to 20 in 1EV steps. www.seaandsea.com



New 10.2 MP Nikon DSLR to be Released on August 9th

In a move to compete with the Sony Alpha, Nikon released a teaser campaign touting a new 10.2 megapixel digital SLR that we can guess is the successor to the D70s. Possibly by the time you are reading this issue of X-Ray Mag, the model would have been confirmed. Can it be a D80 or D90? On a separate but related note – the influx of new DSLR's is making it difficult for the housing manufacturers to keep up the pace-

Currently, getting your hands on a D200 housing is difficult at best, and even finding a retailer with a D200 in stock can be quite a challenge. The housing companies get no special treatment from the camera manufacturers, to whom underwater photography is a small market. Deciding on which models to develop housings for and guessing at production quantities can be a challenge. ■

D2xs

Nikon has announced the D2Xs, a subtly upgraded D2X. The main improvements are a larger 2.5" LCD monitor, modified metering in high-speed crop mode, a longer lasting battery, black and white mode, Adobe RGB in all color modes, up to 3 custom tone curves, and 1/3 step ISO boost options. ■



Adobe Purchases Rawshooter, Launches Beta-version of Lightroom

Adobe Systems has acquired the technology assets of Pixmantec ApS, makers of digital imaging software that provides advanced workflow management and processing capabilities for digital camera raw files. The acquisition strengthens Adobe's leadership position in raw processing.

Camera RAW workflow software enabling digital photographers to efficiently download, browse, view,

prioritize, compare, edit, correct and convert large batches of digital camera RAW image files. Adobe plans to integrate Pixmantec raw processing technologies into Lightroom.

Lightroom is Adobe's coming image management and workflow software. A beta release can be downloaded for free from Adobe's website until Jan. 30, 2007. ■



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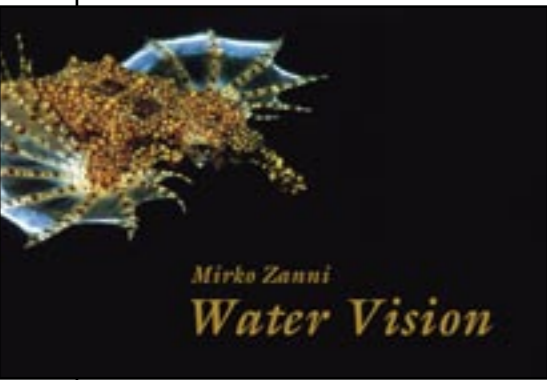
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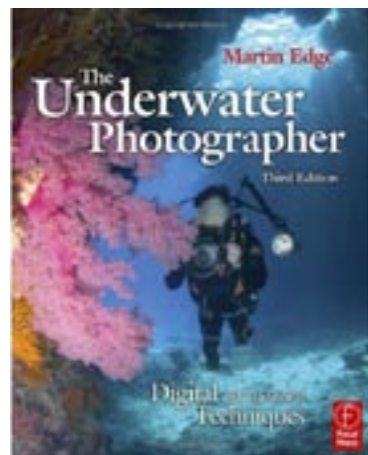
— a New Book by Mirko Zanni



Having spent years and years wandering the seven seas together with his inseparable cameras, Mirko Zanni

accumulated thousands of images, portraying every kind of living creature. Then came the long and laborious process of elimination to arrive at a selection of the best 225 pictures - the most significant, the most exciting to shoot "Water Vision". It's a work of art, down to the last detail with specific aspects that give it a unique position in the current market. With 256 pages, the format of the book is 23cm by 33cm, 66cm when the book is opened. But that's not all. As well as the pictures, Mirko is the author of the accompanying text, together with Licia Paris. Every one of the nine themes have a written introduction so that the reader can enter into the spirit of the marvels under the water's surface. From the spectacular rocks of the river Verzasca, to the frozen mountain lakes, to the inhabitants of the blue depths, and submerged deserts, not forgetting Neptune's gardens, seething with an infinite amount of creatures. All the animals presented in this book have been classified by their Latin as well as their common name, both in Italian and in English. www.mirkozanni.com

The fresh third edition of UK-based Martin Edge's *The Underwater Photographer: Digital and Traditional Techniques* is now and getting raving reviews. No less than 408 pages. Seen on Amazon for around \$25



Viewfinder

Hugyfot have released a 45° viewfinder to go with all their underwater housings. The new viewfinder costs € 795 Euro when ordered together with a new housing, but Hugyfot/GreenForce can also fit it onto older housings for an additional €100. www.hugyfot.com



Imageviewer

Don't have a laptop? This Media Storage and Viewer Stores up to 10,000 photos or more than 14 hours of video. Comes with a large 3.6" true TFT color screen display and a Compact Flash card slot and rechargeable battery www.mymediagear.com

Pre-announcement: Indonesia's First International Underwater Photo Competition

DEEP Indonesia 2007 is proud to announce that together with DivePhotoGuide.com and Wetpixel.com, will be hosting a world class international photo competition.

Photographers will compete in 7 categories to win premium dive travel packages to some of the top photo destinations in the world, photo equipment, dive gear and more!

The contest includes a category for images that focus on conservation and the marine environment, one specifically for entries taken by compact digital cameras, and one specifically for Indonesian entrants. The categories for this inaugural event will be: Reefscapes, Divers, Animal Portrait, Animal Behavior, Compact Camera, Environment and Conservation, and the Indonesian Category. Complete details, prizes, sponsors rules and regulations will be posted by August 2006 with an official call-for-entries. ■

Winning Images from the BP Kongsberg Image Competition 2006

Images from the deep oceans are not something that most of us have the ability to shoot. Most deep sea images are dull and scientific feeling. However, this unique competition brings the best of deep ocean images to the forefront of our attention and furthers the awareness of the unknown realm. Through close collaboration with key players in the oil and gas industry, the "Scientific and Environmental ROV Partnership using Existing Industrial Technology" (SERPENT) project aims to make cutting-edge ROV technology and data more accessible to the world's science community, sharing knowledge and progressing deep-sea research. In association with BP, Kongsberg and the National Oceanography Center, Southampton, SERPENT has organized a photo and video competition that resulted in some truly unique images. The winning images and video footage can be viewed online at: www.serpentproject.com



Photoevent Calendar by Jason Heller

August and September are big months for competition deadlines. Good luck!



Aug 10th
6th Marmara Festival Underwater Photo and Film Competition – (Turkey)
▶ www.marmarafestival.org

Aug 15th
The 7th Annual San Diego UnderSea Film Exhibition – (USA)
▶ <http://sdufex.com>

Aug 21st
Scylla wreck photographic competition – (UK)
▶ www.national-aquarium.co.uk

Aug 30th
The Santa Barbara Ocean Film Festival – (USA)
▶ www.ocean.com

Sept 1st
XARIFA Unterwasser Foto&Video Festival – (Germany)
▶ www.uwfv.de

Sept 7th
Vodan 2006 – (Slovenia)
▶ www.drustvo-vodan.si

Sept 15th
33rd World Festival of Underwater Pictures – (France)
▶ www.underwater-festival.com

Sept 15th
Popular Photography & Imaging Annual Reader's Picture Contest– (USA)
▶ www.popphoto.com

Sept 22nd
2006 LAUPS International Competition – (USA)
▶ www.laups.org

Sept 30th
Canon (US) National Park Photo Contest – (USA)
▶ www.photoworkshop.com

