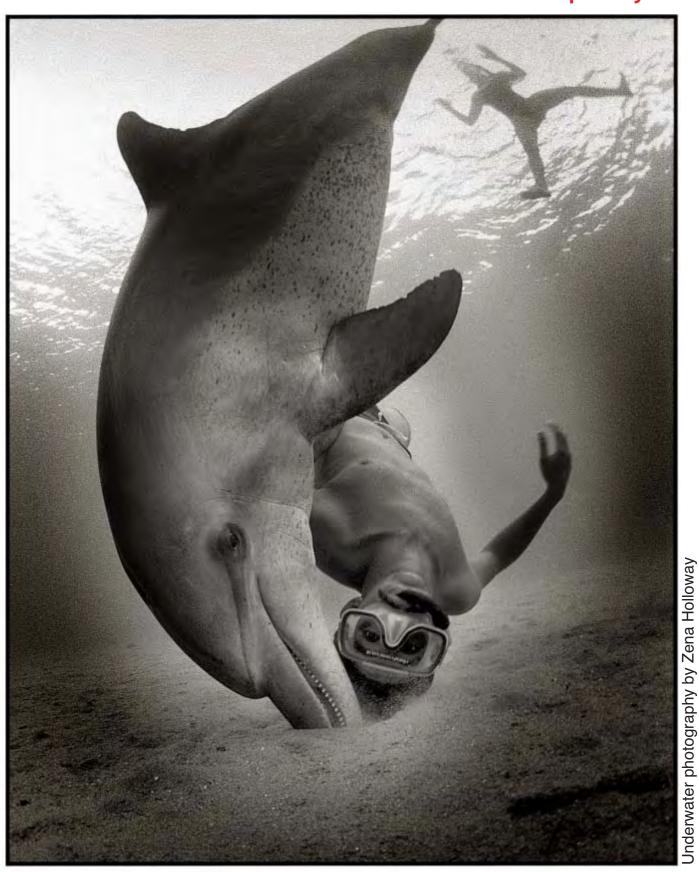
Underwater Photography

a web magazine Apr/May 2003



Mohammed and Olin

Sea&Sea D100 Basking sharks

Nexus D100 Whale rescue

Zena Holloway **Blennies**

Dominica Frogfish

Mozambique Macro rigs



international journal of the sea



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Underwater Photography

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a web magazine Apr/May 2003 uwp@uwpmag.com



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The times they are 'a changing

Don't get me wrong - I'm all in favour of progress but I heard something recently which has made me wonder where it's all going.

There is a new groundbreaking technology which claims to eliminate depth of field. Now you can either reread the last sentence as many times as you like until the enormity of this capability sinks in or I can help emphasise it with simple block capitals. THEY ARE DOING AWAY WITH DEPTH OF FIELD.

Now I know this is the April/May issue of UwP which should be available on or around April 1st 2003 but I can assure you that this is definitely not an April fool. Go to http://www.colorado.edu/isl/intimages/3coloredf.html to see and example or to http://www.dpreview.com/news/0303/03031803wavefrontcoding.asp for some more information.

I must confess when I first learnt of this I was impressed to think that macro shots could be sharp throughout the image but then I got to thinking and I've come to the conclusion that I really don't like the idea at all.

Depth of field is an important fundamental characteristic of photography. It can be used to great effect to make the viewers eye look at the important part of an image.

I'm all in favour of digital photography as long as that is what it is - photography - recorded digitally - complete with depth of field.

Some things are not for tampering with, I say.

Editorial

Announcing a New Look and Web Site for UwP!

The reader base of UwP has grown and changed over the past two years and we are currently in the process of upgrading the UwP on-line infrastructure to match the quality of our magazine contents.

If you are reading this you will already know that UwP's web site is now .com rather than .co.uk. You should also have noted the comprehensive new site which has been designed by Deb Fugitt from Texas.

Deb is in charge of the marketing for UwP and is a web site designer of many years experience. She currently manages internet marketing for Aquamarine Diving, Matangi Island, South Sea Adventures and now UwP.

Deb comes with a computing background and is concentrating on establishing the exact statistics which the site generates i.e. how many people download UwP, where they are from and where they came from.

These statistics are vital if UwP is to generate advertising revenue and, as I hope you appreciate, without this revenue UwP will either have to charge or disappear.

Subscribe, link and refer a friend to UwP (please).....

http://www.uwpmag.com/subscribe.html

Subscribing to UwP is simple, costs nothing and entitles you to future benefits such as photo classifieds, discounted dive trips and much more.

I would urge you to support our UwP subscription service for several reasons.

Firstly it allows us to know more about where UwP readers are located and we will produce the most accurate reports possible to show our advertisers who our readers are, and where they are located. These reports will be available on the site.

Secondly you can give important feedback about the content of UwP and what you would like to read in the future.

However, be assured that your email address and any other information you provide on any of our forms will remain private and be used only to determine the future of UwP Magazine.

If you enjoy UwP, we encourage you to become a registered reader, to "link UwP from your site" and "refer a friend".

We're all in this together but the future of UwP depends on you!

Peter Rowlands

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e mail peter@uwpmag.com

Green Nikonos

I have a green Nikonos as you mentioned in UwP11. Black body with green inserts.

I have had it for a number of years as a backup or second film body. I use the orange body with Kodachrome for big animals in blue water and have the green body loaded with Fuji Provia 100F which I can push process when working later in the afternoons. That way I have two cameras colour coded for the film they contain; orange for the red Kodachrome and green for the green Fuji packaging.

Good to see that you have implemented the letters page for input. Now ifyou can only go with the horizontal A4 format

> Regards, Kelvin Aitken info@marinethemes.com

For readers information Kelvin's last comment is a suggestion that I layout UwP in the horizontal format which would be more compatible with the shape of a computer monitor.

I personally prefer the vertical format and advertisers are used to the sizes this requires so that is quite a strong reason to continue but if enough of you want horizontal, I will certainly consider it.

Ed

Too technical?

As regards feedback, I think you do an excellent job but I would like to see more casual stories for the common diver/ photographer.

Sometimes I find certain articles too technical and detailed that they require some

Readers Lives

UwP welcomes your feedback. E mail feedback@uwpmag.com

concentration, and do not serve well for pleasure reading. I see the point in education though so I do appreciate these articles too.

Maybe I would balance out more in favour of the former.

Anyway, keep it up.

Regards Gordon Sammut tweety1980@global.net.mt

This is the age old dilema for a specialist subject publisher and is a very dificult one to get right.

Any reader can influence the content of UwP by voting for their favourite type of article. Please vote at http:// www.uwpmag.com/ subscribe.html Ed

Available light with digital

I've read with great interest your article "Filter fulfilment" in the current issue of Underwater Photography, as well as Alex Mustards's on the Nikon D100 and its white balance control. Certainly, digital cameras seem to be breaking new ground in uw photography.

I've always been interested in available light uw photography and have tried darkroom and digital techniques to restore colour from bluish slides (you can see my website http://greenleafhomes.net/ fotosub/ or Golden Dolphin issue #9 - Oct/Dec 2002).

I haven't tried digital cameras and would like to perform some kind of comparative test, such as shooting the same subjects with slide film and digital, both with and without colour filter, and at different depths. So I wonder if you could help me and take the pictures, or know of someone that could do it. Maybe it could make a subject for an article.

Regarding the available light pictures taken with digital cameras that I've seen in your magazine (issues #8 and #11), I guess you show the raw file (ie, no correction in Photoshop or similar).

However, I find that the camera's white balance is just the first step in colour correction and a second step in Photoshop is necessary in many cases (eg, in the picture in issue #8, p.38, the sea looks greenish and the light area in the surface looks magenta, both hues easily corrected in Photoshop without affecting the rest of the image). So, I'd suggest showing both the raw file and a fine-tuned version.

> Jose joseuw@lycos.es

I am hoping to have an article comparing film to digital, with and without filters in a future Issue of UwP.

Regarding the available light digital images, they are straight from the camera and have not been adjusted in Photoshop. I think including 'before' and 'after' shots would not be suitable in such a review but would be more suited in an article such as 'Using Photoshop'.

Ed

Beginners requests and Jim Church

I've just found your website (last week) and have downloaded all of your excellent magazines. I'm reading issue 11 just now, SPLENDID! Referring to Pete Steggle's "Beginners Wanted" item, any articles to help us new boys (or girls) would be appreciated.

Your articles about care and maintenance of the Nikonos system in early issues I have found very useful. Could perhaps do with some information on how to improve results in dark low viz water, I dive mostly in the Clyde or Loch Fyne on the west coast of Scotland.

One other thought would be an item about film, written by an established pro but perhaps explaining how to get the best out of various types of film, colour reversal, neg, black & white, fast and slow. For example I'm very interested in natural light shots in UK waters I also like the mood a B&W shot of a wreck can invoke, eerie, dark, deep! but how best to take the shot and options of what film to consider using, and why.

I notice the main thrust of your magazine is

towards Digital and/or housed systems, however I feel if you could continue to have a good celluloid article that would be nice.

Finally just a word about Jim Church. About a month ago I bought his guide to the Nikonos system, a fabulous gold mine of information for anyone who has one of these cameras or, I think, any underwater camera. I'm now looking forward to receiving his "guide to composition" the man was inspiring.

Eric Smith Kilmacolm, Scotland

If there is anyone out there who could do such an article about film I would be interested to hear from you.

Ed

UwP welcomes your feedback or requests. E mail feedback@uwpmag.com



News, Travel & events

Jim Church Medal for Excellence in Digital Photography



Beneath the Sea's Armand Zigahn has announced that the inaugural *Jim Church Medal for Excellence in Digital Photography* had been won by Mark Snyder from Astoria, New York for his study "Squid, Dominica."

In announcing Mark Snyder's achievement, Armand Zigahn 'remarked on the classic lines of Mark Snyder's photograph, it's threedimensional lucidity, and the elegance that the photograph imparts to the animal. "Clearly," Zig said, "these distinguishing characteristics and the classic lines of art and composition seen in this digital photograph, demonstrate the elegance and beauty that Jim Church natured in his students as qualities worthy of bringing home from the sea."

Mr. Zigahn went on to note that the Digital Photography contest, a new addition this year to Beneath the Sea's Photo Contest, had been well subscribed, and that, while Mark Snyder's photograph took the best of it, the contest submissions had made the decisions difficult and demanding, in that all the work submitted had been extraordinary in both subject matter and quality of presentation.

We congratulate the winners and encourage everyone to view these winning photographs on the Beneath the Sea website at

www.Beneaththesea.org

San Diego Underwater Film Festival

We are very pleased to announce the San Diego Underwater Film Festival. This year it will be held in conjunction with Scripps Institution of Oceanography's 100 Year Anniversary. It is scheduled for Sunday and Monday evenings, September 21 & 22, 2003 at the Town & Country Convention Center.

Each evening's program will consist of 12 to 13 short films, submitted by both accomplished professional and aspiring amateur underwater filmmakers and videographers.

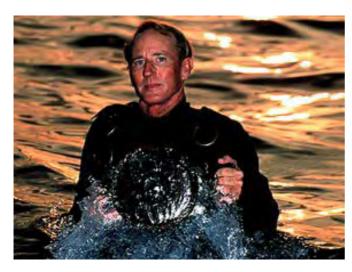
To enter a film, edit a presentation of five minutes or less of your best underwater footage, and submit it to us, so that it is RECEIVED no later than July 1, 2003. Submissions are limited to three films/videos per filmmaker.

Selections will be made by the 15th of August by our judges, who are renowned in the fields of visual arts and media.

Please send your entries to:
The San Diego Underwater Film
Festival
c/o Bob Gladden,
10339 Thanksgiving Ln.,
San Diego, CA 92136.
For any questions please call:
(858) 695-0264 or
e-mail: ovisions@san.rr.com or
Steve Douglas at: (619) 4644505 or e-mail:
steve-sharksdelight@cox.net

Steve Douglas Sharks Delight Productions & Travel (619) 464-4505

Kararu Digital Seminars with Jim Watt



Kararu Dive Voyages is happy to announce that they will be having their first series of digital photo workshops. This will comprise three special trips on board with Kararu featuring the expert digital underwater photographer, Jim Watt www.wattstock.com



Trip dates will be:
November 1-12-2003.
This seminar is for the advanced digital photographer wishing to learn advanced techniques. It is targeted at those who already own

their own digital systems. The trip will be with Jim Watt

November 14 - 25, 2003.

November 27 - December 08, 2003.

All demo gear and technical advice will be provided & sponsored by Berkley White from Backscatter www.backscatter.com and Dan Baldocchi from Light & Motion www.uwimaging.com.

For full details visit www.kararu.com

The 30th World Festival Of Underwater Pictures dives into the 3rd millenium

"For the earthmen sea was flat. Even mixed up with storms, swollen by waves, she seemed to them as a surface, a plain, a skyline. Sometimes a mirror. Always a border: there the human domain came to an end. We put the Sea under zero. Underneath this number depths were not our business anymore..."

Philippe Diolé, who wrote these words fifty years ago was wrong to think they belong to the past. The sea floor state – the closest to the sea resorts – is still not our business.

Due to the demographic growth, the pollution plus the irresponsible behaviour of a few the urban underwater heritage – algues or posidonies meadows, walls, spawning grounds, caves covered with coralline species, shelters – has become a waste ground let to mud and rubbish.

Whether we fail to recognize this situation or we remain unconcerned, let us admit it is not irreversible.

For many years, green belts have replaced waste grounds in city. Today they are seen as its lung showing every day its biodiversity merging into the urban environment.

Logically this green belt concept slides into a underwater application in order to reconcile

townsman with sea bottoms. Experience shows that underwater *fauna* and *flora* come back wherever they have been welcome including in very busy places.

Relying on its pioneer vocation, the World Festival Of Underwater Pictures is seeking a partner to bring imagination to power. How ? By launching an international contest of ideas : To conceive a Blue Space in the heart of the city... ...with its perspectives, plannings, circulation ways, facilities, vehicules, meeting points, monuments, playgrounds, restaurants, life stations...

At the dawn of the 3rd millenium, the Antibes Festival and its partners challenge the new architects, town planners, designers, creators (such as Jules Verne)...For the Depth to become at last our business!

This contest is under Jacques Rougerie's presidency in collaboration with Paul Robin, Philippe Vallette, Lucien Laubier, Daniel Mercier and many underwater specialists.

For more information visit:

www.underwater-festival.com

E-mail: spondyle@wanadoo.fr

New products

Nexus housing for Nikon D100

The Nexus housing for the Nikon D100 digital SLR camera is now available and it is extremely compact and lightweight (just 1.8kg).

Unlike most European manufacturers who machine housings from a solid block of aluminium, Nexus housings are still cast aluminium. There is no real physical advantage to either method of production but the solid machining method is supposedly faster from drawing board to production as a mould does not have to be made to produce a casting which is then machined to take the controls.

The truth, in reality, seems not to be the case because Nexus housings are readily available whereas most other housings are in short supply.

The Nexus D100 housing continues the same design philosophy which has attracted many pro underwater photographers. The handles are an intergral part of the design andthey place your hands/fingers very ergonomically. However, on a camera with so many buttons and dials, no manufacturer could get all of the controls in the perfect place but the Nexus does a pretty good job.

All of the controls are mechanical and they include Function dial, Flash sync mode





button, Exposure compensation button, Shutter release button, Power switch, Focus mode selector, Sub-Command Dial (Aperture), Main-Command Dial (Command), Multi selector, Protect button, Enter button, Delete button, Focus area lock switch.

Whilst all of the rotating controls are very easy to use, the small push button ones are not quite so easy. The reason is that

they have to be pushed down flush or even slightly further than the perspex (plexiglas) plate in which they are housed. Some of these controls are also very close together which can be confusing.

I think the reason these controls operate as they do is because they look very similar to those used in the highly popular range of Olympus digital housings but, because the

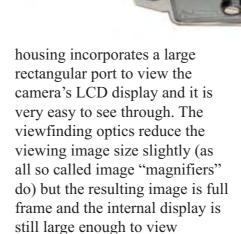


perspex plate is quite a bit thicker, the operation of the control is not as good, especially with gloves. Also other manufacturers offset the controls inside the housing so that the controls, on the outside, are further apart.

A simple solution to improve the Nexus design would be to remove the inner rubber covers on the internal buttons and replace them with ones just slightly longer (perhaps as little as 2-3mm) and I think this would help a great deal. Another alternative would be to make the external buttons longer and I understand Nexus are working on this.

The two halves of the housing are retained by traditional spring-loaded overcentre catches which are positive and secure. However care has to be taken when undoing them not to get your fingers trapped between the catch and the handle. As far as I can remember, this has always been the case with previous Nexus housings so forewarned is forearmed (or should I say forefingered...).

The camera mounts positively onto a traditional baseplate and the controls align up well. The rear section of the



The Nexus D100 takes the same screw thread ports are previous Master Series housings so you should be able to accommodate virtually any lens in the Nikon range.

comfortably.

Two Nikonos flash/strobe connectors are provided and there are two extra ports for customising purposes. The internal design of the flash connections is unpluggable so it would be possible to have a "manual" (i.e. non DTTL) connector if you aren't using a Nikon DTTL strobe or a fully DTTL one if you are.

The Nexus D100 housing is an attractive, compact package with high quality contruction and finish. It is competitively priced compared to other aluminium housings so if you are a Nikon D100 owner (you lucky thing) and you are looking to use it underwater down to 75m (246 feet), I would recommend you check it out.

As you probably have gathered this is a 'dry' review and by that I don't mean that I was sober when I wrote it but rather that I didn't take it on a dive (too busy working for UwP...) but I'm sad to report that I'm a bit of a housing anorak and I'd like to think I know a thing or two.

Hopefully, in a future issue of UwP we will include a 'wet' review.

Peter Rowlands peter@uwpmag.com

Nexus Wet Lens fits UK Coolpix 5000 housing

The Nexus Wet Lens is the convenient way to shoot larger than life. Add it to your 1:1 macro lens and get a 30% increase in magnification.

The Nexus Wet Lens slips on and off underwater and does not affect your autofocus.

The Nexus Wet Lens is available in three sizes - 110, 100 and 90mm diameter so they may fit other systems but they can be fitted directly onto Subal and Nexus macro ports. In addition, as is shown here, they also fit the UK Coolpix 5000 housing.

For further details contact Ocean Optics. optics@oceanoptics.co.uk



Ocean Brite digital lights

The TREK LED Light generates a very bright light (5500 Degrees Kelvin) with a 70 Degree Beam for use with your Digital Camera.

These lights are depth rated to 300 feet and will provide up to 5.2 Hours of usable Video Light at 5500 Degrees Kelvin.

The Cannon 100 HID Light generates a very

bright, intense light (6000 Degrees Kelvin) when used with the standard UK diffusers will generate a







slightly wider 50 Degree Beam for use with your Housed Digital Camera.

The Ocean Brite 100 Degree Beam Diffusers are, optional @ \$50 each.

These lights will burn at full video power (6000 Kelvin) for 1.5 to 2 Hours and are depth rated to 500 feet.

The Ocean Brite Quartz Halogen Light (4200 degrees Kelvin) is more compact and provide an adjustable source of light for your Digital pictures burning 30 minutes at full power (33 watts) and 60 minutes at 1/2 power (17.5 watts).

For further details contact Ocean Brite 4943 Pretty Doe Lane

Paso Robles, California 93446

Phone: United States: (800) 549-4861

International: (805) 237-3966

Fax: (805) 227-6705

Email To: jbullitt@oceanbrite.com







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Sea & Sea DX D100 camera housing By Charles Hood

Many described the Coolpix 5000 as the birth of high quality underwater digital photography. If that is accepted then the Nikon D100 is a fully blown teenager! It's got a few spots and throws the occasional tantrum but it's got all the makings of a sophisticated grown up. Along with the FM2 and F801s the D100 is sure to go down in Nikon's history as a classic.

In UWP 11 Alex Mustard guided us through the adolescent. He gave us a low down on mega pixels, ISO settings and colour balance, but here I review the new Sea & Sea DX D100 underwater casing.

I should maybe first start with why I chose it. The simple answer is that it was the first housing anyone could get to me. Ikelite and Hugyphot were months away, Nexus was unannounced and I think I was 14th or so in the queue for a Subal. However, I had already taken the decision to trade up from the Coolpix 5000 due mainly to shutter delay. So with that system already sold and a shoot two weeks away it came down to a relatively simple choice the DX-D100 or to borrow something else. Steve Warren of Ocean Optics very kindly offered the latter, but I wanted to use the D100.

First impressions?

It's a bruiser weighing in at 5.5kg and 14 inches (360mm high).

Sea & Sea have moved away from their traditional aluminium building material and



constructed the housing from ABS resin and polycarbonate. It quite dwarfs my F100 housing but to its credit has a very similar and familiar layout. Moreover, the handles and tray are quite large and I felt I was taking a step backwards after the very compact Coolpix 5000 and Subal housing. On the other hand it does appear well manufactured and up to the rigours of professional use.

All the controls are stainless steel and line up with little problem to the camera. In fairness to Sea & Sea, the D100 is quite a bit bigger than the F100. It further has far more buttons so an inevitable increase in size is a necessity. I am not used to a 'see-through' housing so it was also reassuring to be able to see no water inside. I've always has leak detectors in the past but I've always had a nagging doubt about them not working properly or the battery being drained.

How did it handle underwater?

Very well. With the shallow dome port and two medium size strobes it feels nicely balanced and weighs about half a kilo negative in seawater. I used a 512Mb memory card that gave me well in excess of 100 high resolution jpeg images per dive. This resolution is of good enough quality to print at 300 dpi up to A4 size (i.e. a full page in a magazine).

As I have generally found with all digital cameras a good deal of tweaking is required underwater to get a nicely lit and saturated image when using the program setting so I shot the whole week in manual mode. This suits me better as I am used to using manual mode most of the time with the F100.

The staggering difference, which is not particularly new to the D100, is instant results. But what is different is that the screen gives a much better





indication as to whether the image is sharp than previous cameras I have used.

My modus operandi was to guestimate the exposure and shoot. Fine adjustments were made to either the aperture or shutter speed until the perfect lighting effect was achieved. This often took three or four frames to get perfect. The other great advantage over non-SLRs digital cameras is I could shoot all the way up to f32 giving me a tremendous depth of field. The

playback feature, operated through the housing, was then used to show the client the 'perfect image' underwater. This allowed them to confirm that we had what they wanted or a different approach was necessary while still being in situ. I think they were far more impressed than I was.

What about the controls?

Just about every control you could require is accessible via a plethora of push buttons and

dials. The camera slides into the housing on a quick shoe and lines up fairly easily with all them all. The only essential thing to remember is the rubber eveniece on the rear of the camera must be removed. If you forget, or don't fully read the manual, everything works fine except the main control wheel enough said. A big advantage to existing Sea & Sea housing owners is that the ports are identical to the F100 housing and can be easily interchanged with each other. A nice modification over the F100 housing is that the focus select knob has been extended with a stainless steel shaft. This allows the control to be reached even with the large eight-inch (21.4cm) dome attached. Further the tray allows the use of this large dome without the housing toppling over on dry land.

Disappointingly and similar to the NX100 housing the shutter release spring has not been improved, and is far too weak. The result is many unwanted frames or repeated frames. With the F100 housing it is easy to make a third turn in the spring to tighten it up, however, I had to resort in wedging a half inch (1.25cm) piece of eraser underneath it to achieve a similar result.

All other controls felt easy to use with the single exception of the camera's front wheel. I set this to control the aperture as part of the custom camera settings. This mode of working is mandatory if using G lenses. However, it does require you to make quite a few turns to change from one f stop to the next. I thus might go back to using the aperture gear on the left hand side, which has a much higher



gear ratio. The back is fastened by no less than four over-centre catches without the necessity for any tools. These are a bit fiddly to line them all up, but certainly felt secure when closed. They further lock shut making the back virtually impossible to open by accident.

Functions accessible include:

- * Mode Dial
- * Power Switch
- * Shutter Button
- * Exposure Correction Button
- * Sync Mode Button
- * Illuminator Button
- * Sub Command Dial
- * Function Dial
- * Focus Mode Select Dial
- * Light Level Control Correction Button
- * Format Button
- * Bracketing Button
- * Monitor Button
- * Menu Button
- * Thumbnail Button
- * Protect Button
- * Extended Function Control Connector
- * Enter Button
- * AE/AF Lock Button
- * Main Command Dial

- * Multi Selector
- * Delete Button
- * Extended Function Control Connector
- * Strobe Connector

What strobes did I use?

The flash arm shoes, which accept flash arms such as Ultralight or similar, are on each handle and not the housing. This does further increase the size but I didn't find it of any detriment underwater. The housing has two five pin Nikonos style sockets mounted on the top. The sockets, however, only have two pins that are connected. There is a good reason for this. If one connects all five pins and uses any strobe other than Nikon's own SB-80DX, SB-50DX or SB-28DX they won't fire. Even the Nikon SB24/25/26 etc won't work unless you set them to Auto mode (i.e. non TTL). So only two pins will fire non- Nikon digital strobes. But if you are intending to house a Nikon digital TTL strobe you will require all five pins. Don't you just love those guys at Nikon! Thus my Sea & Sea YS50 and

YS60 strobes had to be used in manual mode. This was not really a problem. They give out heaps of light to correctly expose a digital image and indeed I used diffusers on them for most of the time. The rule of thumb was f5.6 at 2 meters, f8 at 1 meter; f11 or 16 close up (the D100 was set to the lowest ISO which is 200). Similar to negative film and unlike slides, digital has a wide degree of exposure tolerance. It was thus quite easy to get correctly exposed results using manual flash.

Value for money

I think Sea & Sea may steel a great deal of the market share with the DX-D100. It has a very reasonable suggested retail price of £1300. Furthermore already the street price is about half that of some of its aluminium competitors. If you have or are thinking about getting a D100 then this housing is definitely worth considering. Yes it's not aluminium, but in two years time it will be out of date and in semi-retirement as the D200 (?) version replaces it.

Specifications:

Compatible digital camera: Nikon D100 Construction - Front case: ABS resin, Rear case: Polycarbonate Depth rating: 60m/200 feet Dimensions (housing only): 363 x 220 x 135mm (14.3 x 8.7 x 5.3 inches)

Weight: Approx. 5.5kg

Charles Hood

Senior Correspondent Dive magazine charles@dive.uk.com

Steel Investments Are Riding High For Coolpix Owners. (But Plastic Doesen't Look Too Clever).

The UK5000 housing compliments the Nikon Coolpix 5000 beautifully. From the beginning it was designed soley for that camera. Smaller, lighter, tougher and easier to handle than the plastic "one box fits all" designs being rushed to market, the UK5000 took time to develop. And it shows.

Aluminium has long been the preferred choice of professional underwater photographers who measure value for money in terms of longevity, durability and reliability. The UK 5000 hugs the camera to keep the overall dimensions as small as possible. And because it is so compact it displaces little water (remember Archimedes?) so its already slightly negative. So you don't have to travel with a weight tray to get it underwater. Controls are laid out to make shooting as easy as possible. The inside of the housing is flock lined to absorb light and avoid internal reflections that could mar your images. The housing hull is secured by safety locked over centre catches.



The heart of any camera is its optical system. UK Germany provide a flat port for use with the 5000s built in zoom. This is the ideal range for fish photography. Macro is yours at the touch of a button. If you want to shoot really small add the inexpensive Nexus Wet Lens. Easily slipped on and off during the dive, this specially designed dioptre lets you shoot tiny animals up close and personal.

For wide angle choose Nikons EC68 wide angle adapter. It's

perfect for large subjects like divers, sharks and

mantas. UKs dome port lets you take it underwater.

And you are assured of the widest choice of flashguns through UKs use of the Nikonos socket. This is the industry standard. So you are not forced to buy an own label strobe from your housing manufacturer. Naturally, the UK 5000 also accepts the grounbreaking Inon T Flash, the ultra compact wide angle gun that's receiving rave reviews from the serious set.

Of course even the best housing can be rendered useless if the back ups not in place. At

Optics we pride ourselves on our aftersales. So we won't let you down for the sake of an O ring or take three months to service your housing. Which is why Ocean Optics is the first choice of so many top underwater photographers, photo journalists, authors, commercial diving companies and scientific diving teams.

As we've explained, the UK 5000 has little in common with a plastic housing. Other than price. At just £999.00 it's a steal.

Ocean Optics

13 Northumberland Avenue, London WC2N 5AQ Tel 44 (0)20 7930 8408 Fax 44 (0)20 7839 6148 E mail optics@oceanoptics.co.uk www.oceanoptics.co.uk

Zena Holloway - a limited edition

Zena Holloway is without doubt Britain's leading underwater commercial photographer. Her images are striking, instinctive, driven by a deep understanding of her medium'- Zena has been diving since she was a child. She delivers the remarkable—combining the highly technical aspects of underwater photography with superb creative direction resulting in the capture of extraordinarily magical imagery. Zena has expanded a concept and taken it to new depths and at twenty-nine years of age, she is an exceptionally gifted artist.

Zena Holloway has released an exciting range of signed Limited Edition prints for 2003.

There are 20 stunning images in the collection featuring a wide range of subjects, from surreal seascapes to amazing swimming horses.

To compliment Zena's new print range is a beautiful new book called Sirénes. Published in November 2002 by Édition Hors Collection, Paris the book is packed with rich new underwater photography. Sirénes is available from www.amazon.fr. ISBN # 2-258-05662-4

To view the collection go to www.zenaholloway.com and click on 'print sales' or click on the following link: http://www.zenaholloway.com/ prints.html



<u>Hetty</u>

This shot was part of a collection of commissioned material for the Daily Mail which ran in June 2001. The 'Little Mermaid' was great fun to work on. The kids were just electric and didn't need any encouragement to dress up and prance around in the water for the camera. The little girl in this shot was just so cute, I think her face looks like she's just walked off a Pears Soap commercial. I used natural light and a Nikon SB104 strobe on the camera to pick up detail on her face. Nikon F90 in Aquatica housing with 20mm lens.



3 Gold Fish

This was probably the most technically challenging image of the 5 selected. Shooting a white background is never straight forward and underwater it's more complicated. This was a personal shot and so I had time to test before the actual shoot day. The fish were in a clear plastic container and the model is from one of the top London agencies. The background was a white sheet lit by several slave strobes to overexpose it by about two stops The film was Provia 100 and the settings were 1/60 and 5.6.

London based Zena learnt to dive whilst still at school and when she left she went on a two week diving holiday in Egypt. As happens to many young people it turned out to be a life-changing experience and led her to abandon her plans to study architecture choosing instead to work at the dive centre and train to be a diving instructor.

After a year she moved on to the Cayman Islands and started videoing trainees. A chance encounter with a crew filming underwater models dressed as mermaids triggered thoughts of a new career direction so she got a jobas a camera assistant and safety diver.

This was the ideal opportunity for Zena to learn the basics of professional underwater photography but it was stills rather than movies which appealed to her most.

Zena's big break came when she started experimenting with pictures of young children underwater taken at a mother and baby water safety class in Brighton. She then combined these with her conventional underwater images from Cayman and the result was two volumes of her book Waterbabies.

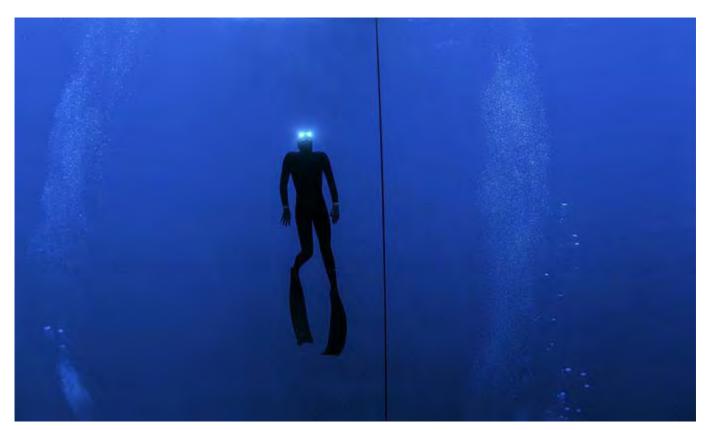
This display of her fresh new talent lead to commercial assignments for magazine features and advertisements and



she has never looked back.

The universal appeal of

The universal appeal of Zena's work has meant that she is commissioned widely for both commercials and print. Her agent



This image was taken at the Red Sea Freediving Championships a few years ago. All freedivers always look absolutely fantastic in their black neoprene and long fins so it's easy to get lots of amazing pictures. The sun light hit his mask only for a second and seeing the glint through the viewfinder I just clicked it off. The action was so fast that I didn't know if I'd caught it until I got the film back

Mohammed and Olin

a week later. All light was ambient. Mamiya RZ67.

I think probably the most photographed dolphin ever Mohammed and Olin do make such wonderful subject matter. I was shooting into the light so really couldn't see very much through the finder. It wasn't until I got the film back that I realised what a brilliant shot it was - I don't know where the swimmer came from and God what a pose!

Nikon F90 with 20mm lens

<u>-75m</u>





Seahorse

This was shot with a Mamiya RZ 67 camera in an Aquatica housing. It's a monster to use but the film is monster size as well which makes it all worth while. You'd never guess just how fast horses swim! Unusually for me getting out of the way was top priority and getting the shot came second on this one. This available light shot was on Fuji 400 print film and the exposure was F8 @1/125th sec.

is the Peter Bailey Company and her clients include:

BBC, Elastoplast (TBWA) Sony (TBWA), EMI/Parlaphone, National Geographic, Discovery Channel, The Natural World, Irish Tourist Board, The Body Shop, Faberge, Virgin Cosmetics, Playtex, Oceanic, Sunday Times, Radio Times, Dazed and Confused, Tatler, Arena Magazine, Harper Collins, Dorling Kindersley, Vauxhall, Ashpark Water, O'Neill Clothing, Jazz FM, Silvia Mantegna, Unibanco (Bates), Banca Generali (Young & Rubicam).

Zena has also directed two award-winning underwater commercials for Unibanco's 'Oxygen', commissioned by Bates Advertising Agency. The commercials took the top international Gold Fin award at the Festival Mondial de l'Image Sous Marine, France in 2002, as well as receiving a recommendation at the Portugese Advertising Festival.

Zena is very much aware that equipment solves problems and has reinvested her earnings into cameras, housings and lighting. She currently has a Nikon F5 and F90 35mm SLR's in Aquatica housings, a Nikonos with 15mm lens and SB104 strobe and finally a Mamiya RZ67 medium format camera, again in an Aquatica housing.



Zena portrait by Julian Newman

www.zenaholloway.com/ www.zenaholloway.com/ prints.html

Modesty Blaze

The Macro Sized Flashgun with Wide Angle Ambitions

This is the Inon T Flash.

Don't be deceived by its compact dimensions. It's guide number of 22m at 100 ISO equals many popular mid size strobes. and it's 100 degree coverage exceeds most unless you add a light sapping diffuser.

The T Flash is four way compatible to work flawlessly with a range of film and digital systems. It offers TTL dedication with the Nikonos V and RS, and most 35mm Nikon and Canon Autofocus SLR housings.

Users of high end digital systems like the Coolpix 5000 and D100 can select from 11 manual powers set in discreet half stop increments for precision lighting control. With Olympus Camedias in PT housings automatic flash exposure is assured via a fibre optic link. And for slave use you can depend on the



built in "TTL" sensor for fuss free perfectly balanced images.

For aiming your strobe at night, checking the colour of your subject or macro photography take advantage of the Ts built in modelling light. It's linked to the shutter release on most cameas to come on just as you need it. For distance shots in clear bright conditions use the laser to confirm proper strobe placement.

With all these benefits you'd expect a thumping big price tag. You'd be suprised. This outrageously speced flashgun is priced as modestly as it is sized.

The Inon T Flash. From Ocean Optics.

See UWP 11 for Mark Websters in depth review www.uwpmag.com



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Dive Dominica

by Peter Rowlands

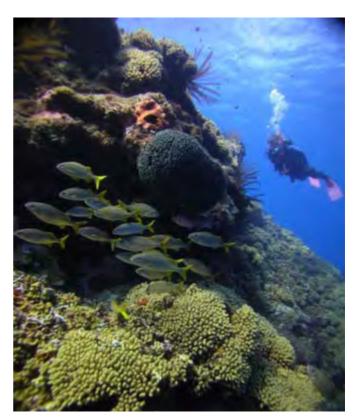
Having been a great fan of liveaboard diving for a long time I wondered how I would take to a land-based diving trip in the Caribbean. I was persuaded by Hilary Lee of Divequest to part with £1400 per person for a weeks full board in Dominica (pronounced dom-en-EE-ka) with two morning boat dives and unlimited shore diving as well as a night dive, if desired.

Now before I start, yes, I DID pay so you're not going to get a freebie-biased report (although travel agents, please note, my integrity can become fragile should you wish to send me somewhere nice at no cost...).

Dominica is an island 29 miles (47km) long and 16 miles (26km) wide just south of Guadeloupe and north of Martinique in the West Indies chain of islands. I flew in November on British Airways from London to Antigua and then a short 40 minute Liat hop to Melville Hall airport on the north east side of the island.

On the hour long mini-bus transfer to Castle Comfort Lodge and Dive Dominica on the more sheltered south west coast, I immediately began to like the place - some hospitable locals had taken the trouble to paint the initials UWP on most of the telegraph poles! Now I am not a man of deep emotions but this welcome was really most touching indeed - a simple gesture and much appreciated. It mattered not that the United Workers Party were campaigning an election at the time - I knew what those initials really stood for.

Castle Comfort Lodge is a 15 room resort right on the waters edge just south of the capital Roseau and ideally situated for access to the best dive sites in the area. I had not come unprepared, having done some research on the internet and asked a question on the excellent "uw-photo" forum. This resulted in my being contacted the very next day by another Dominican dive operator, Simon Walsh from Nature Island Dive (a great fan of UwP, by the way, and I mean the magazine, not the Workers Party) as well as none other than Michael Lawrence who wrote the excellent Lonely Planet Guide to Diving and Snorkeling in Dominica. They both provided very useful help and information and I am very grateful to them for their assistance. I even spent a very pleasant



The visibility was very good as Dominica is a volcanic island. Scotts Head on the outer edge of Soufriere Bay offers some excellent diving with varied topography and plenty of life.

Coolpix 5000, Subal CP5, WC-E68 lens, URPro filter

evening in Roseau with Simon partaking of a Quiz Night where my deplorable knowledge of American 80's television trivia let the side down terribly, I'm afraid.

Most of the rooms at Castle Comfort Lodge have sea views with balconies overlooking a grassy area with a hot tub, small pool and a beach bar. The rooms are basic but provide you with everything you need including airconditioning and plenty of power points. My room had both UK and US style sockets.

Dive Dominica is in the same compact complex. They have four boats and enough aluminium cylinders to become a major player in the metals market should the dive business become unprofitable. There are three compressors which hum away quietly most of the day for, as well as Lodge guests, they also cater for the cruise liners which visit Roseau on a regular basis. This results in a flurry of activity on "cruise ship days" but, with their 4 boats, they are able to keep the numbers per boat down to a comfortable level.

An alternative nearby dive operation is Nature Island Dive in Soufriere run by the aforementioned



Dominica is a beautiful island offering excellent diving and a wide variety of nature walks, waterfalls and whalewatching

Simon Walsh (originally from Camden Town, London). This is a smaller operation but probably more capable of catering for a small groups specialist needs and as Simon is a keen underwater photographer he understands how demanding small groups of underwater photographers can be!

Anyway, the Dive Dominica package includes two boat dives in the morning with an hour interval on board. Most of the good dive sites are about 20 minutes away and all of your gear is taken to and from the boat by the very helpful and friendly local staff. This makes for a most restful form of diving and the dive sites they take you to are very impressive indeed.

The best site by far is not always diveable due to currents but we were lucky and managed to get on the outer edge of Scotts Head where there are four really good sites . The unspoilt marine life (Soufriere Bay is a marine reserve) and topography were beautifully colourful - in fact far more colourful than I was expecting. Barrel sponges, gorgonians, black coral trees and a wide variety of marine life covered the whole area which had a really healthy feel to it.

Second dives were no less glamourous for photographers and divers alike - my very first dive in Dominican waters introduced me not only to a co-operative seahorse but also a couple of frogfish to boot! The dive guides are very helpful but not intrusive and you can proceed at a pace to suit your needs. I and my partner Debbie were left to our own devices most of the time playing with the Subal Coolpix 5000 and Olympus C40. They both had 128mb cards which stored up to 100 shots each



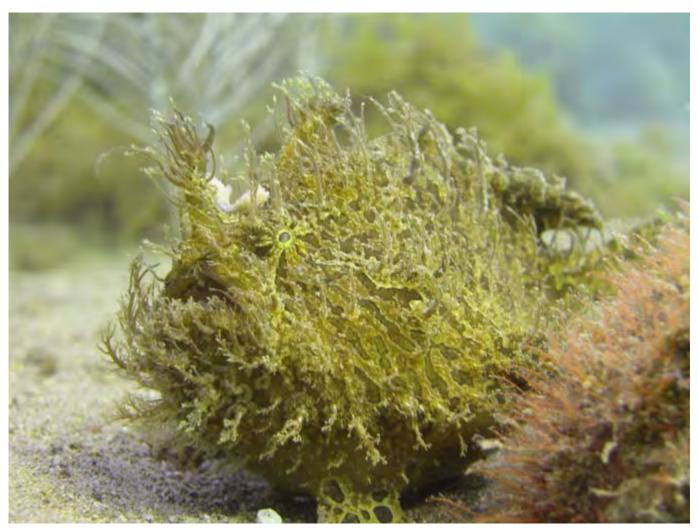
Dive Dominica have four boats and their friendly staff carry your gear to and from the boat.

Seahorses are a common sight on most dives. Olympus C40 with built-in flash



and it was not unusual to come back from the mornings activities with both cards almost full - so many and varied are the available subjects.

In November the water was warm enough (25°C) for just a thin dive skin and there were others who didn't even bother with that. Visibility was always good, as you would expect in a volcanic region. The stormy season tends to be around late August to early October so it is best to



When you find a striated frogfish you become a member of a very exclusive club. Coolpix 5000, Subal CP5 housing, standard lens, URPro filter, available light

avoid the area during these times. The surface weather was typically tropical in such a mountainous, volcanic region with squally showers being replaced by prolonged sunny intervals and the temperature was usually pleasant in the high 20'sC. More importantly, there was very little humidity to worry about and almost no insects that bite!

Back at the Lodge after your morning excursion you have the rest of the day to yourselves. The package includes unlimited shore diving so, after a quick bite of lunch (the food was a very good combination of Western and local cuisine served on an openair terrace overlooking the sea and the staff were very friendly

and most helpful but be informed that Dominican "mountain chicken" is actually frogs legs), it was off the end of the pier and straight into a prolonged session of what is now known as "muck diving". To the uninitiated this may not sound very attractive but to a macro photographer it is paradise. Shallow water, plenty of sunlight and more subjects than you could wish for. OK, the terrain didn't lend itself to wide angle shots but when you've got flying gurnards, batfish (ugly creatures made up of the parts no other fish wanted), garden eels, snake eels, shrimps galore and frogfish-a-plenty, who needs wide angle?

The crowning glory for me was finding not one but two

striated frogfish (Antennarius striatus if you must know). I'm told that these are very rarely seen - the dive guide swore he had never seen one in over a decade and a much travelled American underwater photographer, Maria Hults, who was staying in the Lodge at the time, had never seen one in over 30 years of diving. Being a magnanimous sort of a chap I was happy to conduct tours to show off my unusual find which I was quietly very pleased to have discovered.

Diving discoveries aside, Dominica is far from a one horse dive island. There are whale watching trips, waterfall walks, rain forest treks and boiling volcanic lakes as well as exotic



There are whale watching trips, waterfall walks, rain forest treks and boiling volcanic lakes as well as exotic birdwatching.



The terrain may look boring but the shore diving was an excellent 'muck' dive with plenty of exotic creatures to photograph. Coolpix 5000, Subal CP5, WC-E68 lens, URPro filter I've never seen so many garden eels ona shore dive! Olympus C40 with built in flash



birdwatching (we even watched hummingbirds from our balcony). All of these activities are available as well organised and informative trips with local guides providing useful background information with a tremendous sense of pride in their island.



We watched sperm whales and waterfalls but there is really so much to do in Dominica that a week is just not long enough.

Finally, being land based you have the luxury of cable TV in your room. At home I don't

have such a service so in no time at all I was glued to the remote control watching 5 seconds of each channel at a time. There were 50 channels (oh yes, I counted them...) and I'm convinced that, if you time it



(Left) Castle Comfort Lodge is compact but provides everything you could need and it is right on the water's edge.

(Below left) A frogfish on your first dive is a good omen. When you see two it's very impressive. Olympus C40, PT -012 housing and built in flash.

(Below) The scenery is colourful and varied with good visibility. Coolpix 5000, Subal CP5, WC-E68 lens and URPro filter with available light.



right, you can actually build a whole new channel of your own by just continuously changing channels every 5 seconds.

However my cable TV surfing was to stop abruptly when I discovered..... "The Shopping Channel".

Never having been exposed to such an informative and attractively presented programme, I became mesmerised by the food blenders, bracelets, carriage clocks and weight loss schemes, all of which, without exception, I wanted but definitely didn't need (well, OK, I qualified in every

department for needing the last one). It was then that I found myself definitely interested in a top of the range 2.4 Pentium computer system with all the usual drives, scanner and printer as well as over \$1500 of free software for just \$1499 by credit card (or 10 monthly interest free payments of only \$149.90 deferred for three months!). I must admit I was sorely tempted to have one of those beauties there and then - I was on the edge - completely ignoring the

consequences of excess baggage - but when they threw in a 24/7 helpdesk service that answered calls within 30 seconds I was lucky my partner Debbie came in at just the right time, recognised my wide-eyed state, wrestled the phone from me and hid my credit card. I really was THAT close.

What chance do I stand if they start offering underwater cameras?

Peter Rowlands peter@uwpmag.com

Arun Madisetti



Marine Park manager for the Soufriere Scotts Head Soufriere Marine Reserve in Dominica

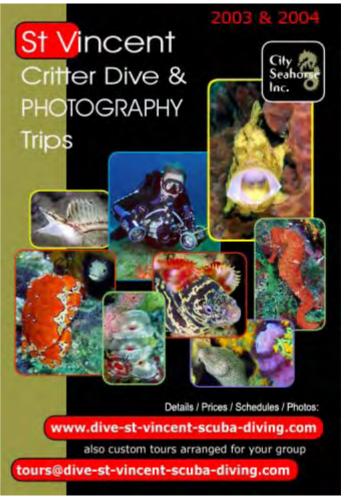
Arun Madisetti, or Izzy, as he is most often called was fortunate enough to have spent much of his youth on the beach, swimming or snorkeling from an early age. He has been diving since the early 1980's, and has worked as either an assistant instructor for the BS-AC, or since 1992, full instructor (MSDT) for PADI. He has been fortunate enough to be able to do this on both sides of the Atlantic, off the coast of the United Kingdom, and ports of call in the Caribbean and the Florida Keys.

He and his family spent 5 years living and diving in the Commonwealth of Dominica and have made the Egyptian Red Sea their "home from home" when it comes to dive holidays. Dominica being the place they prefer to dive regularly. He holds a bachelors degree in Marine Zoology, and a post graduate degree in Shellfisheries and Aquaculture, both from the University College of North Wales at Bangor.

He has been instrumental in producing the groundwork from which two marine reserves have been ratified, one in the Caribbean and one off the North Wales coast, and has had various jobs as underwater surveyor, State marine biologist, and fisheries scientist. Taking underwater photographs since 1990, beginning in North Wales and off northern Scotland. He has had many photos published in tourist magazines and brochures in the Caribbean, in both English and French, and in 2000 he and his wife got some shots published in a coffee table book.

http://website.lineone.net/~izzydiving/





GUINJATA BAY

All the Action - None of the Crowds by Will and Demelza Postlethwaite

Five minutes no-deco left and she glides slowly in and stops feet away. Holding at a 45 degree angle pointing up to the surface she remained motionless just above the reef. Angel's four metre wingspan and spotted markings around her eyes make her one of the most special mantas that come to be cleaned by the little reef fish that appear as she stops. A majestic spectacle, we just hung there with her and squeezed off the two remaining shots on the reel. It is why we dive.

As photographers we are always looking to find those special things to get on film. No portfolio is complete without a shot of this or that, be it mini macro, stunning wrecks or just pristine, colourful reefs, we all look at those shots in the magazines and books and think, "I wish I could do that". Or even "I could do better than that!". The only thing stopping you is that you have to be there, in the water, with your set-up, the right conditions and the subject there too.

This is not a revelation as anyone who has joined the merry throng of dive boats at the wreck of the Thistlegorm in the Red Sea, or the day boat navy searching for whale sharks off Exmouth, Western Australia will tell you. The trouble is that everyone else knows where to go to see these things too. The more 'dialled in' or definite the experience the greater the numbers. In Exmouth they have



Guinjata bay. The view from our 'casita'.

Devil Rays. Nikon F90X in Subal housing, 20mm with compact dome.

No flash. 1/60 f16. Fuji Provia F 100



spotter planes and if you do not see a whale shark you get your money back. In Yap the bay is floodlit to bring in the plankton. What we all want is that secret place where our quarry is awaiting us but there is no queue to get in. Herein lies the catch. How do you get to hear about these secret places! Well, Manta

Reef is not really a secret and quite a few people know about it but for a number of reasons the site has yet to get the recognition that it deserves among the world's premier dive spots.

The experience starts on the beach with Morne's dive briefing. The topography of the site and navigation are not

straight forward but in a couple of minutes he has transformed the wetted sand into a perfect scale model of the reef showing the three manta cleaning stations that are the basis of the dive. Ingenious. All the stations are quite close to each other giving you plenty of time at the 22m depth to see them all and the critters on the way. The mantas are here year round. They are found on dives at this site 95% of the time. They vary from 1-2m juveniles to 5m monster adults. If you are relaxed and calm they circle and then come in "to land". Hovering half a metre off the reef an array of reef fish rise to clean them. While all types of small wrasse and butterfly fish come and nibble at the skin and gills you can edge ever closer. Morne says they have even tapped their wing tips on his head! They know you are there and can be nervous if upset, quite a few have large shark bites on their wings. But when they are relaxed the whole experience is spell binding.

It is easy to lose yourself in it all but watch that no-deco time and look up because there is a resident troop of 20-30 Devil rays that patrol mid water above the reef. You will almost always see them while on your safety stop and we were lucky enough to see a whale shark too! These are another year round resident and, while not a common sight on a dive, are a likely encounter on the 25 minute ride to and from the dive site. Not only are they the biggest fish in the sea but one of the most beautiful. Majestic as they glide by with a little golden trevally riding their bow wave.

Just in case you thought it could get no better, if you



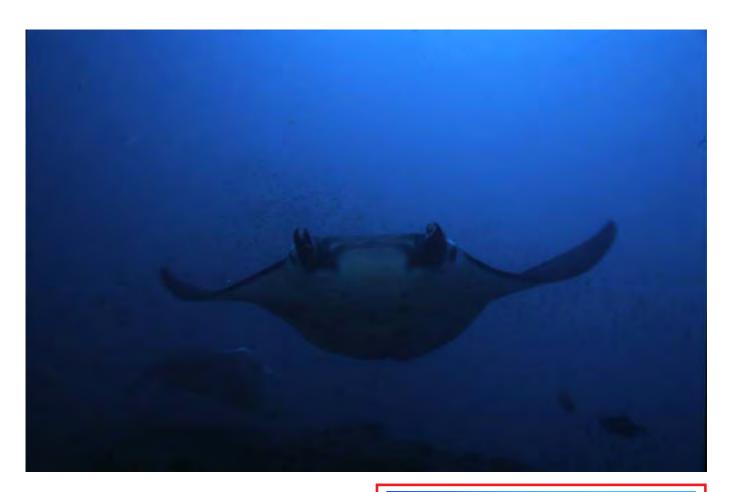


venture there between July and October then you have a good chance of snorkelling with a Humpback whale and her calf. We were lucky enough in November to still see one from the shore migrating back south and had one memorable dive on Manta Reef with a background soundtrack of a male singing somewhere in the distance. Hauntingly beautiful. Unlike in other countries there is no restriction here on on how close you can get to these animals which is great from a photography stand point but leaves it up to you and your boat operator to act responsibly.

All shots taken with a Nikon F90X in Subal housing, 20mm with compact dome. 1/60 f8 Fuji Provia F 100

Please do.

If for some reason you tire of encounters with big stuff (big game fish and all manner of sharks are a possibility too!) or you are cruising between the cleaning stations then do not forget your macro. Spanish Dancers crawl about during the day almost as a challenge to other myriad nudibranchs that cover the reef. Crabs and gobies of all types and definitely the biggest sizes we have seen any in



the world inhabit the anemones. With a little care you might even encounter frogfish or Harlequin shrimp.

So why is Manta reef so relatively undived? Well it is in Mozambique. The painful civil war ended ten years ago and slowly the country has been getting itself back onto its feet. Most of the resorts are less than five years old and the South Africans have been keeping it a secret! But while they know all about it they only go for the occasional weekend or during the school holidays (Easter and December to February). The rest of the time the resorts are virtually empty. However the beer and wine are still excellent as are the steaks.

For photographers this place has it all but the big stuff feeds on plankton. The vis. therefore is not that of the Red Sea or the Caribbean but at between 15-25m is amazing considering. Sometimes the plankton itself is big enough to shoot. The place still has that aura of adventure especially with the southern African trademark surf entries and exits in the dive boats. In years to come the crowds might arrive like they have done to Yap and Exmouth but in the meantime we have it to ourselves and it is unbeatable.

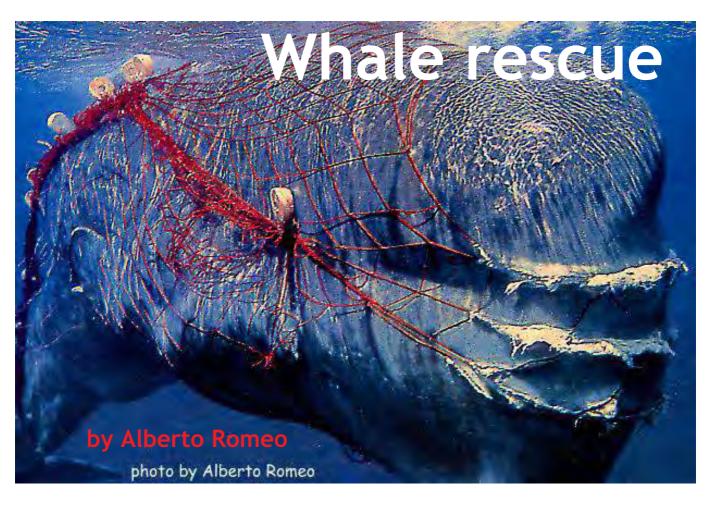
> Will and Demelza Postlethwaite www.sevenseasimages.com



Unrivalled Diving, Unrivalled Price 5th-17th Oct. 2003. 6 places left.

Timed to coincide with migrating Humpback whales with calves, the trip includes 3 days diving at Tofo and 6 at Guinjata Bay. Dive the famous Manta Reef for year round mantas, whalesharks and devil rays. Other sites for leopard sharks, harlequin shrimp, game fish and plenty of critters. Less than £1500 inc. flight, accomodation, 18 dives.

> Contact Demelza Postlethwaite melz@sevenseasimages.com www.sevenseasimages.com



It was summer 1981. My wife
Lucia and I with some friends Piero di
Gregorio, Franco Capodarte, Leonardo
Capodarte and Claudia Capodarte all of
whom are members of Gruppo
Ricercatori ed Operatori Subacquei
(G.R.O. Sub. - an underwater association
that defends and photographs marine
wildlife, of which I am the president)
were in navigation with our boat the
"Maria Gabriella" (15 m.) in the south
Tirreno Sea (Mediterranean sea) between
the islands of "Lipari" and "Salina" in
the "Eolie Archipelago" in front of the
east side of north Sicily where the sea is

very, very deep 2,000 m. (Canion di Stromboli) A place where the Giant Squid (Architeutis sp.) lives!

We were searching for marine mammals. The weather was fine. The sun was shining, the sea quiet, no wind.

Then it happened.

We received a radio message that a whale was trapped near Lipari and Salina Islands and it was dangerous to navigate in the area. We decided to investigate!

We found the whale 4 hours later. It was a big (15 m.) Sperm whale (Physeter macrocephalus) in

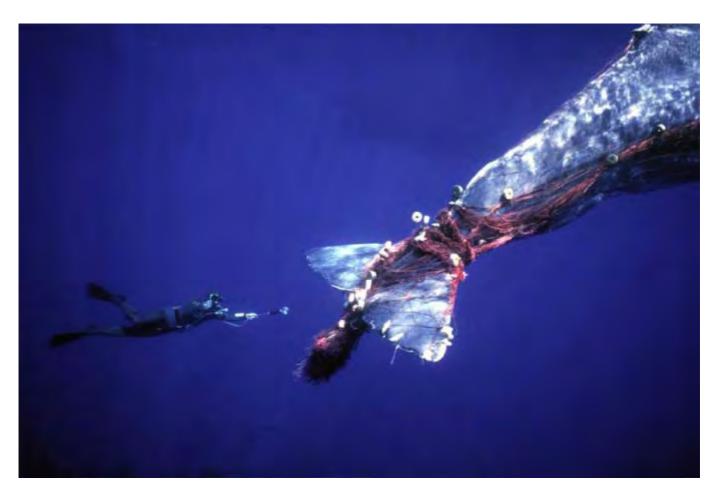


a trap, set by professional marlin fishermen who use forbidden, very long drift nets (1-3 km.)!

The Sperm whale was still breathing! So we immediately entered in the water and saw massive injuries to his head.

We began to cut off the net and to photograph the event. We heard the "tic-tic-tic" of his sonar, we saw many scraps of his skin in the sea, so some of us began to caress his soft skin near the eyes. He looked at us and we felt that he was understanding that we were saving him !!!

We had no fear when we cut the net away





from his head. And, as his jaws opened for the first time in a long while, we felt that he understood that we were his friends!!

The only fear we had was from sharks, as there was blood in the water, but they did't appear.

It was most difficult to cut off the netting from the tail because he began to wave it up and down making the divers that were working there, feel very nauseous!

After we cut away the net-trap near the tail he began to swim away. After a few meters and with only a little piece of net still attached to his tail he turned to us, to say "thank you" and as silent as we found him he slowly swam away and out of sight.

To this day we have never heard of anyone

who has witnessed such an event.

It took six hours of hard work to rescue our "Moby Dick" but we were all very happy to do this rescue and give life back to a marine mammal which would have surely died. All of us are now interested in Sperm whales all over the world and would like to contact anybody who is involved with rescuing large marine mammals everywhere.

The net-traps are very dangerous for marine mammals so my association (G.R.O.Sub.) and others (WWF-Greepeace-Mare Nostrum-Italia nostra-) lobbied our government to forbid this type of fishing for marlin. After that the European parliament outlawed this long net 2-3 km (2 miles) from the year 2001 but mostly, we fear the Japanese who fish in the Mediterranean Sea!

All u/w photographswere taken with a Nikonos III + 15 mm Lens - Available light . 1/60 F. 5,6-8. Kodak Ektachrome film.

Alberto and Lucia Romeo e mail albertoromeo@neomedia.it www.romeofotosub.it



The search for Red Blenny

(or climatic change or insufficient data?)

by Paul Kay

As underwater photographers we all need to be keen observers of the undersea and its natural history, if for no other reason than trying to identify good subject matter. And being in the marine environment, this more often than not means watching its inhabitants and shooting natural history photographs.

Now I am not a marine biologist (despite having been described as such in various diving magazines), and would much rather classify myself as a marine naturalist. In this role I am the equal of anyone else who dives, as I can make observations of the species I encounter and their behaviour firsthand, and, providing I try to understand what I am seeing, am quite able to see things which are currently unrecorded (or at least impossible to find any existent records of).

This was brought home to me when I got a roll of film back from Glasson Rock of Inish MÙr in the Aran Islands, Galway Bay, Ireland. This is a spectacular dive, You can follow a ledge along a sheer limestone wall until a boulder slope appears below. Many fishes, crustaceans and invertebrates make excellent subject matter (the cuckoo wrasse are tame despite not being diver fed), but it was one pretty red 'Tompot' Blenny which caught my eye.

I was using a Nikon 28~105



Red Blenny Aran - The yellow-fringed, dark-blue spot on the dorsal fin of the blenny is very distinctive and identifies it as a male in breeding colours. Aran Islands, Galway Bay, Ireland. Subal with Nikon F100, 28~105 AF Nikkor at 105mm, single SB105 Flash on TLC/Ultralight Arm using Fuji Provia 3.

zoom lens on by Subal encased F100 and two Nikonos SB105 strobes. This acts as a 50~105 macro lens capable of focussing down to juat a few centimetres, and whilst not giving quite as close focus as either a 60 or 105 micro-Nikkor, it makes up for this in terms of versatility. Well, to get back to the 'Tompot', it was sitting on a rock and allowed me to zoom to 105 and compose. I took a couple of shots.

As with many pictures, it isn't until they are back and on the lightbox that anything 'special' is revealed. This was the case here. Under the loupe, the Provia transparency showed a fascinating but strange feature of the 'Tompot'. It had a yellow fringed, very dark blue spot towards the front of its dorsal fin. Now I've seen a lot of

Tompot blennies but never one with such a marking, and it looked odd in other ways, as the body was not so 'stout' as a normal Tompot's and the eye did not seem quite 'normal' either.

So I sat down with my books (a vast collection made over the last twenty years) and drew a blank. No temperate book contained anything remotely like this. So what was it? Well as Sherlock Holmes would undoubtedly have deduced, when the probably is exhausted move on to the improbable, and I did.

Eventually I located a similar looking fish in Peter Wirtz's book "Underwater Guide Fish - Madeira, Canary islands, Azores". this did not show the spot, but the eye and a blue patterning on the fish's face did



Red Blenny Islay - No spot is visible, but the eye and facial markings show this fish to be the same as the one off the Aran Islands. Subal with Nikon F60, 60 AF Micro-Nikkor, single SB105 Flash on TLC/Ultralight Arm using Fuji Velvia. Photo by Lucy Kay



Tompot Aran - This photo was taken within minutes of the two red blennies at the Aran Islands. This tompot is quite clearly a different fish. Aran Islands, Galway Bay, Ireland. Subal with Nikon F100, 28~105 AF Nikkor at 105mm, single SB105 Flash on TLC/Ultralight Arm using Fuji Provia 3.

look similar (I had thought this just a variation on a Tompot's colouring). I queried the book's author (an expert on Blennies) regarding my fish by emailing a jpeg file off to him (the wonders of technology) and it was soon confirmed, I had photographed a

Red or Portuguese Blenny.

Not only this, but the fish I had seen was a male in breeding colours (the picture was taken in June this year) and this was the cause of the spot - although in my specimen this was apparently very pronounced.

Now here's where the fun starts; just what does this isolated record mean?

I had some detective work to do. A round robin email to people I thought may be able to answer this revealed one confirmed record in the Scillies, and also that more information was being sought about this fish's distribution in Ireland.

Having now ascertained that I was not looking at a Tompot and having determined the nuances other than the spot which were different to an ordinary Tompot, I started to wade through my many thousand underwater photos from Ireland. I now had a nagging suspicion that I had seen this fish before. And sure enough I found it.

The previous year I had dived in south-west Ireland and had photographed a group of Tompots in a crevice. This was in itself unusual as Tompots don't tend to be very gregarious, but I'd not really thought a lot about this at the time. As I reviewed the photograph it was clear that these too were red blennies. I searched further and then started on my wife Lucy's photos.

Sure enough another photo appeared. This time from St. Kilda! not the world's best phot but one I'd taken when my old SB103s had been playing up (old age - I'm very grateful for Nikopn's recall). This again showed the red clour and blue patterning. Next Lucy's pictures

revealed another, again in a crevice and this time from Islay.

Another friend has a nice photograph of a reddish Tompot that he took framed and on his wall. Next time I called on him I examined it. Another one and from Kil;da again! Recently I found that my searches were not unique. Nigel Motyer (another contributor to UWP) has had the same problem having seen the fish for years - he too finally identified it as the same Red Blenny. He added more records from Kerry to Donegal.

So we now know that the Red or Portuguese Blenny can be found all along the western Irish and Scottish Coasts. But what does this mean?

Well it is tempting to think that it is an indicator of that inconcept Global Warming. Now whilst scientific evidence backs warming thoroughly, there is very little reason to believe that its effect will be the shift of 'southern' species northwards especially in the short term. In fact there is as much discussed about alterations in the Gulf Stream and what they might mean (it could cool down our own (temperate enough) seas. So the occurrence of one unusual fish in an area that it has not been recorded from before, is not an earth-shatteringly important event!

It is though a fascinating glimpse into what we are able to see for ourselves, something unusual enough to be overlooked by the academics and authors of many books. Perhaps it is something that should reinforce what we already know - that the marine environment is still a poorly understood place where observational skills can still reveal the unexpected, and where



Red Blenny Kerry - Again the eye and facial colouring identify their owner as a Red Blenny hiding behind a lump of boring sponge. Scarriff Island, County Kerry, Ireland. Subal with Nikon F100, 60 AF Micro-Nikkor, single SB105 Flash on TLC/Ultralight Arm using Fuji Velvia.



Red Blenny Kilda. - This fish too is obviously another Red Blenny, but this ime the photo is from far to the north off St. Kilda, NW Scotland. Subal with Nikon F801, 60 AF Micro-Nikkor, single (worn out!) SB103 Flash on TLC/Ultralight Arm using Fuji Velvia.

the camera is still coming into its own. Without a photograph, I would not have identified this fish as anything other than a Tompot and it is quite likely that it would have been far longer before anything went into print about its distribution as it is here

Paul Kay BSc FRPS HSE Pt 4

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Basking Shark Photo-identification

By Martin How, The Shark Trust

Basking sharks are the largest animals to frequent the coast of the UK and Ireland, but are also among the most elusive. Their mottled grey hulking forms can regularly be seen cruising close to the shoreline on calm springand summer days as they feed on plankton blooms that form at the water's surface, but until recently almost nothing was known about the way they lived. Over the last three years conservationists at the Shark Trust and the National Marine Aquarium in Plymouth, Devon, have been putting together a catalogue of photographic images of basking shark dorsal fins in order to help researchers further their understanding of these magnificent creatures.

Many of the images contained on the database have been submitted by members of the general public around Europe and the success of the project relies heavily on this kind of participation.

Growing up to 12 metres in length the basking shark (Cetorhinus maximus) isranked second only to the whale shark of the tropics in terms of size. Thespecies can be easily recognised by its cavernous mouth lined with five pairs of gills that almost completely encircle the head. Basking sharks feed on plankton in a process known as 'ram filter-feeding', which involves swimming forward, mouth agape and filtering the plankton as the water passes through the sievelike rakers lining each gill opening. Basking sharks are



A basking shark feeding on plankton near the water's surface. (c) Jeremy Stafford Deitsch.

regularly spotted feeding in shallow inland waters with their large dorsal fin projecting high above the water and may often be seen performing what is thought to be courtship behaviour involving a single or several males cruising slowly behind a female shark in a process known as 'close following'. Sharks displaying close following behaviour have been mistaken in the past for sea monsters, as the row of fins observed at the surface can easily be confused for a single animal.

Threats

Because basking sharks take a long time to reach maturity and have a very low rate of reproduction the species are particularly vulnerable to the multitude of threats posed by humans. Until recently the species supported a number of local fisheries based in the UK, Ireland and mainland Europe. The sharks were caught and processed for their liver oil, meat and cartilage, but most of the fisheries were forced to close within a few years of starting due to drops in the number of shark catches and more modern replacements for many of the shark-derived products.

In more recent years several new and potentially devastating threats have come to light. The growing East Asian demand for shark fin products has made shark and shark-like fins extremely valuable, with single basking shark fins fetching up to US\$ 10,000. In order to satisfy the market demand fishermen have developed the wasteful and unsustainable practice of shark finning - the process of cutting off the fins of a shark and then dumping the rest of the body at sea unused. Although



This basking shark, known as 'Rooster', has a severely injured dorsal fin probably caused by a close encounter with a large propeller. (c) Eric Stephan.

unregulated shark finning will hopefully soon face a total ban in European waters basking sharks still face the threat of legal and illegal finning activities in other parts of the world.

The Shark Trust is currently compiling a petition to be presented to the United Nations campaigning for a global ban on the unsustainable process of shark finning. If you would like to support the Trust by signing the petition see the details at the end of the article.

Another major threat to basking shark populations is accidental entanglement in fishing gear. Very little is known about the number of basking sharks that die each year from becoming entangled in fishing nets and potting lines, but estimates suggest that this may be a serious problem for this vulnerable species.

At present basking sharks are protected under Annex II of

the Convention for the International Trade in Endangered Species (CITES) signed by 160 countries. This means that fishermen must obtain special licences to fish the species and imposes important data collecting and reporting requirements on the abiding governments. Basking sharks have also been protected in UK waters by section 5 of the Countryside and Rights of Way Act which makes it illegal to intentionally kill, injure or harass the animals within UK waters.

Photoidentification

The use of photography for identifying and tracking the movements of marine animals dates back to the early studies of whales and dolphins in the 1970's. Scientists working with



Basking shark dorsal fin images from the photo-identification database. (c) Colin Speedie.



Screenshot of the European Basking Shark Photo-identification Project database. The database contains the photo-identification images as well as any accompanying sighting details.

(c) Martin How.

these animals had to overcome a number of difficulties associated with work at sea, such as the battle with the elements, spiralling research costs and the task of locating their species of interest in the vast, featureless oceans. The development of photo-identification techniques allowed researchers to gather information cheaply using only a boat, a good photographic camera with a powerful zoom lens and a clipboard to note the sighting details. Furthermore, the general public are able to participate in the study by submitting their own photographs taken from whalewatching boats and pleasure craft.

Photo-identification as a scientific technique is relatively simple to perform. In a process

similar to fingerprint matching, photographs of specially chosen areas of the body are used to identify individual animals.

The images are added to a central database and matched with any other previously identified animals. In this way scientists can gather a wide range of information spanning from the growth rate of the species to their migration patterns around the oceans. Some of the larger-scale photoidentification projects such as the humpback whale catalogue have collections of many thousands of individual animals spanning over decades and use advanced computer software to automatically match pairs of sightings.

The European Basking Shark Photo-identification

Project (EBSPiP) is the first of its kind and was set up in 2000 as a joint venture between the Shark Trust, the National Marine Aquarium and a number of other national and international conservation organisations. The catalogue focuses on collecting images of basking shark dorsal fins, but also includes images of other areas of the body that show identifiable characteristics. So far the database contains over 250 photo-identification images spanning from 1995 to the present and to date 58 sharks have been identified and assigned individual nicknames ranging from 'Admiral' and 'Badge', to 'Wrinkly' and 'Zip'.



More basking shark photoidentification images. (c) Colin Speedie.



A feeding basking shark photographed off the south coast of Cornwall. (c) Colin Speedie.

Taking photographs for the EBSPiP

The usefulness of the European Basking Shark Photo-identification Project for basking shark research depends on the number of photographs present on the database. The more photographs, the higher the probability of finding matches between images and it is these matches that give scientists the vital information they need about the biology and behaviour of the species.

It is relatively simple to take photographs of basking shark dorsal fins and many of the images present on the database have been contributed by interested members of the public.

Useful photo-identification images can be taken either from the surface or underwater. An ideal set of photographs will contain the whole dorsal fin face from both left and right sides. Like many animals basking

sharks are often not the most cooperative photographic subjects so a perfect set of photographs is rare. Generally we must make do with distant, blurry images of only partial fins, but even these can often lead to conclusive matches.

If possible, when photographing from the surface try to maintain yourself between the sun and the shark. This avoids silhouetting so that the colour and pigmentation pattern of the dorsal fin can be used for identification.

It is important to take great care not to disturb the animal's normal behaviour while photographing basking sharks. Remember, it is illegal to harass basking sharks in UK waters. Many of the sharks on our database have severe dorsal fin wounds obtained from collisions with vessel hulls and propellers so the Shark Trust recommends that vessels keep a distance of 30 metres from all sharks while maintaining slow speeds and extra vigilance to avoid injury. Often, when a vessel is near a

group of basking sharks it is best to stop the boat and let the sharks approach of their own accord.

Divers and snorkelers need to keep a minimum distance of 4 metres from basking sharks at all times and are urged not to alarm the sharks by using flash photography.

More information

For more information on the European Basking Shark Photoidentification Project visit the website at:

www.baskingsharks.co.uk.

If you have any basking shark images of your own that you would like us to include on the database please send them by e-mail to:

basking sharks@national-aquarium.com

or send them by post to the Shark Trust at:

EBSPiP The Shark Trust Rope Walk Coxside Plymouth PL4 0LF

> Martin How The Shark Trust

The Shark Trust

The Shark Trust is the conservation charity dedicated to the study, management and conservation of sharks, skates and rays and secretariat of the European Elasmobranch Association. The Trust is a membership organisation. Join now and receive your supporter pack, free shark poster (EU only) and newsletters.

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Addictive Frog Fish

by Mark Webster

It has become very fashionable to admit your addictions these days. In fact society has become so tolerant of our self inflicted failings that you can get treatment for almost any addiction ranging from sex to soap dramas, drugs and alcohol and, what's more, much of this curative treatment may be free on the health service. In this politically correct world it seems that it must never be the patient's fault. So, in the hope of receiving the same level of understanding, and perhaps some much needed treatment, I thought I should be amongst the first underwater photographers to declare my own addiction, which I am sure is not unique to me alone. It is difficult to admit it, but I seem to have become addicted to frog fish! Now that it is out in the open perhaps I will be contacted by a number of frog fish support groups, but until then maybe I should try and explain what is so alluring about these critters to help others recognise the symptoms and avoid the same fate!

I saw my first frog fish quite by chance some twenty six years ago whilst diving in Eilat. I had no idea what it was and this was also before underwater photography had consumed me, however, I felt instinctively the need to identify this strange fish and more worryingly the desire to search for more. Once photography had gripped me this urge to search for frog fish became irresistible each time I



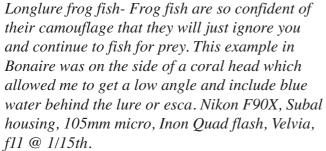
Longlure frog fish - The new elevated position of this medium sized (15cm) frog fish offered the opportunity of including the surrounding reef and adding a classic diver pose in the background. Carrying two systems, one in this case with an 18-35mm zoom, opens up your imaging possibilities.

Nikon F90X, Subal housing, 18-35mm zoom @ 18mm, two Inon Z-220's, Elitechrome EBX, f11 @ 1/60th.

visited tropical waters and now every dive is tinged with this need. The quest of course is never ending as there are so many variations within the species and I know that my collection is paltry compared to that of other photographers and this of course is what drives me on!

There are between 12-15 genera of frog fish which include more than 40 different species, and identifying them all is





further complicated by the individual variations of colour, pattern and shape that each fish adopts to suit its immediate environment. Fish of the same species can appear with totally different colouration, texture and pattern and they have been observed to change their colour in a matter of minutes or hours when they move location. They are able to perfectly match their surroundings, which might be sponge, coral, rocks and seabed debris or mixture of one or more.

This camouflage technique is not for protection from predators but is to conceal the frog fish from its potential prey, a technique that marine biologists have labelled aggressive mimicry. It seems that the only reliable way to identify the individual species is by the shape of the lure (or



Ocellated frog fish - It is unusual to find a frog fish sitting on live coral, presumably due to the mucus or stinging cells in the polyps. This small (4cm) example in Bonaire obviously has the feet for it as he had been sitting in the same position for several weeks apparently. Nikon F90X, Subal housing, 105mm micro, Inon Quad flash, Velvia, f11 @ 1/125th.

esca) that the fish uses to entice prey to within striking distance. These may take the form of a small fish, shrimps, worms or planktonic juveniles and if the lure gets damaged or eaten by another fish they are able to regenerate it and continue fishing. There is also a deep sea species of frog fish which possesses a luminous lure to attract its prey in the dark. This level of classification is mostly beyond me and I am more than satisfied with just finding one of these beasts! I have done my best to identify the species which accompany this article but would happily be corrected by anyone with superior knowledge.

Once the preferred prey has been encouraged to approach the killing zone the frog fish is able to strike at amazing speed, as little as 5-10



Striated frog fish - The really unusual species of frog fish are quite common in the Lembeh Straits. I asked my guide if he knew where to find a striated frog fish and the reply was "no problem, long hair or short hair?". This is the short haired variety with its lure extended to attract unsuspecting prey. Nikon F90X, Subal housing, 60mm micro, YS50 and YS30, Velvia, f11 @ 1/60th.



Wartskin frog fish - Some frog fish are tiny and therefore much more difficult to spot. This one is only 4cm long and the dark colour made the task even more difficult against the black volcanic sands of the Lembeh Straits. In fact this example is right next to the tail of the yellow/green wartskin frog fish in the previous picture, and it was not until my second visit that I saw him after the guide had explained that there were actually two together! Nikon F90X, Subal housing, 60mm micro, YS50 and YS30, Velvia, f11 @ 1/60th.

thousandths of a second. It does this by extending its mouth and creating a negative pressure inside the oral cavity which literally sucks the prey into the frog fish's stomach. In this way they are able to snatch a fish from a shoal without the other fish noticing and are easily able to consume prey as large as themselves. If you watch a frog fish for long enough you may be lucky enough to observe a yawn or stretch of the mouth in relatively slow motion which might give you the opportunity to

Painted frog fish - It is unusual to find a frog fish so exposed on the top of a reef, yet he was obviously convinced that he looked like a sponge growth. I found this example in shallow water in the Similan Islands, in Thailand, where frog fish were quite difficult to find until I stumbled across this one. Nikon F801, Subal housing, 20mm, YS120 and YS30, Elitechrome, f11 @ 1/60th.



Wartskin frog fish - The Lembeh Straits in North Sulawesi, Indonesia is frog fish heaven for the addict. They are considered common and most of the guides want to concentrate on showing you more unusual species! There are many different species and variations here and between the frog fish are a host of other amazing subjects. . Nikon F90X, Subal housing, 60mm micro, YS50 and YS30, Velvia, f11 @ 1/60th.



capture it on film. There are some marine biologists that suggest this may be a sign of distress or threat, however each time I have observed it the fish has continued to ignore me and continued to use its lure to attract prey. This would suggest to me that they perceive these clumsy reef visitors as neither a threat or competitor and we are regarded with disdain.

Frog fish generally remain in a small area on the reef, so once found you should be able to return and find the same fish again. That is the theory of course. They do move short distances, but are very poor swimmers, preferring to walk or skip along on their hand like pectoral fins. For longer distances they employ a form of jet propulsion by swallowing water and ejecting it out of the siphon like gills hidden behind their pectoral fins, a little like an octopus or cuttle fish. Having moved they will then adopt the necessary camouflage changes required for their new environment. That of course is the problem for the photographer addict who could be within

inches of the fish but still cannot find it!

Frog fish are found throughout the tropical and subtropical seas, but are more common in some areas. In the Red Sea I have only ever found them reliably in the north, particularly around Eilat. They are seen elsewhere but I have yet to spot one south of Ras Mohammed. In areas like Malaysia and Indonesia, particularly the Lembeh Straits, they are considered common and so the addict could be in danger of overdosing! The Caribbean



Giant frog fish - This shot is taken on a dive site called the Pinnaclejust north of Taba on the Israeli/Egyptian border. These large frog fishseem to be quite common in this area and on the other side of the gulfaround Aquaba. Nikon F3, Hugyfot housing, 55mm micro, YS50, Agfachrome 50, f8 @ 1/60th.

salve for this disease which will include extended periods of submersion in soothing tropical waters being slowly fed these weird denizens, in the vain hope that you will be weaned off your habit!

Mark Webster



Mark Webster is the author of 'The Art and Technique of Underwater Photography' (published by Fountain Press) and Diving and Snorkeling Belize (lonely Planet) and hosts regular workshops both overseas and in the UK. For further details visit Mark's website at www.photec.co.uk

hosts several species and there are frog fish 'hot spots' like Bonaire, St. Vincent and Dominica. In fact species like the 'hairy' version of the striated frog fish, which you might expect to encounter in the Far East, are now being found regularly in the Caribbean (most notably by our editor on a recent trip to Dominica).

Although it is difficult to differentiate between male and female frog fish they do come together regularly to mate. Methods vary between species and some merely consign their offspring to the planktonic soup, whilst others (generally the male) either guard their clutch or actually carry them attached to their pectoral fins until they hatch.

Is there a suitable treatment for this affliction? Now that the NHS is offering treatment for such a variety of self inflicted addictions I am hoping that they will recognise the plight of underwater photographers and the irresistible attraction of frog fish. Of course there is only one



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Non-Reflex Amphibious Cameras: Building an Effective Macro System

By Craig A. Vitter

It has often been said that Macro photography is easy. There is some truth behind this belief as beginners, with a minimal amount of equipment, can achieve acceptable macro results with little or no practice. However, if you are looking to achieve better than "acceptable" results from your macro images, a thorough knowledge of the specialized equipment and techniques available to the macro photographer will help tremendously. This article focuses specifically on the macro equipment options available to photographers using the two most popular non-reflex (rangefinder) amphibious cameras on the market today: the Nikonos V (no longer in production) and Sea & Sea's MotorMarine II-EX. While the basics of macro photography are the same whether using a rangefinder or single lens reflex (SLR) system, the equipment available differs enough to warrant a separate exploration focused strictly on rangefinder systems.

Macro Lenses and Extension Tubes

Macro photography requires getting exceptionally close to your subject matter and having the appropriate optics required to focus on objects within inches of the lens. To achieve this manufacturers have designed macro lenses and extension tubes that decrease the



All of the macro images in this article were shot using the Sea & Sea MotorMarine II-EX with either a Macro Lens 2T (1:2) or 3T (1:3) conversion lens. Illumination was provided by dual Sea & Sea YS-60TTL S strobes synchronized with a 4 Pin Dual Sync Connect, mounted using Sea & Sea's Hot Shoe Arm and Sea Arm V. A Sea Arm IV was used as a handle for carrying the system.

minimum focusing distances of standard lenses. Unlike standard lenses, macro lenses and



extension tubes are not identified by their reproduction ratios not focal length. The reproduction ratio is expressed as a simple fraction, where 1:3 represents 1/ 3 life size, and describes the ratio of subject matter size to the size of the subject as captured on film.

Since the MotorMarine II
X and the Nikonos V systems are rangefinders it is not possible to compose macro images using either cameras' built-in viewfinder. To compensate for this, macro lenses and extension tubes are isually sold with framers or obes. Framers and probes extend from the front of the camera and are used to visually identify the image area and point of sharpest focus for a particular

lens or tube. This combination of

minimal lens-to-subject distances

and framers projecting from the

camera make it very difficult to get close to highly mobile subjects.

The Sea & Sea
MotorMarine II-EX is produced
with a built-in 35MM primary
lens. In order to shoot macro
images with the II-EX system
you must purchase one of two
Sea & Sea conversion lenses: the
Macro Lens 2T (1:2) or Macro
Lens 3T (1:3). These two lenses
mount directly to the built-in
35MM lens using a bayonet
mount and can be mounted on
land or underwater. Both macro
conversion lenses come with
integral framers.

The Nikonos V system uses extension tubes for macro photography. Extension tubes are metal cylinders (usually constructed of aluminum) that mount between the camera body and lens (the 28MM or 35MM lenses specifically). There are several companies currently producing extension tubes for the Nikonos systems including Sea & Sea (www.seaandsea.com), Helix (www.helixphoto.com), Ocean Optics (www.oceanoptics.co.uk), and Gates. Of theses companies, all but Ocean Optics include macro framers as part of their extension tubes. The Ocean Optics extension tubes are unique in that they utilize less intrusive "probes".

Selecting Macro Lenses and Extension Tubes

The process of selecting which macro lenses or extension tubes to purchase for your system should be a fairly simple process. Since most manufactures of extension tubes sell kits including tubes and framers for several reproduction



Fast moving subjects like this Damselfish require time and patience to capture when using a macro framer. (Macro 2T Lens, 1/125th at F22)



rations (1:1, 1:2, 1:3, etc.), the most economical method of getting started is to purchase one of these kits. The choice of which kit you purchase will likely be determined by price or the type of extension tubes carried by your local underwater photography vendor. The only other option that might influence your choice of extension tubes is whether you prefer to use a framer or probes (like those offered by Ocean Optics). MotorMarine users have even

fewer options than Nikonos users. Basically you can purchase the 1:2, 1:3, or both lenses from Sea & Sea.

If you are new to underwater macro photography your initial attempts to capture macro images should be made with a lens or extension tube with a low image reproduction ratio such as 1:3. 1:3 lenses/tubes are more forgiving to work with than lenses/tubes with higher magnification ratios. This is due to the fact that the lens-to-subject

distance and the image area are larger. As your macro skills increase you can move on to high reproduction ratios, like 1:2 or 1:1, to capture smaller subjects.

Strobes

The limited depth-of-field inherent in macro lenses and extension tubes require the photographer to use small apertures (i.e. F22 or F16) and strobes to achieve the best results. While this may seem like a limitation, in reality it is an advantage providing the photographer with complete control of their lighting. Additionally, since most macro photographs are shot with a lensto-subject distance not exceeding seven inches, the absorption of light by the surrounding water is negligible making the colors recorded on film richer.

The following is a list of factors to consider when purchasing strobes for macro photography:

- * TTL Does the strobe sync properly with the cameras TTL functionality?
- * Manual Power Settings Ideally the strobe/s you purchase will offer at least some limited manual control over power output (i.e. Full, 1/2, 1/4, etc.).
- * Guide Number The rated output (on full power) of the strobe.
- * Slave Capability Strobes that slave can be used in dualstrobe applications to provide fill lighting in response to a master strobe's light output.

First, the majority of strobes offered today will work correctly with your camera's TTL



Goldetail eels make excellent macro subjects. Colorful and curious, eels often allow close approaches with macro framers. (Macro 2T Lens, 1/125th at F22)

(commonly referred to as Through The Lens) exposure system. This allows your camera to monitor the strobe output and quench, or turn off, the strobe when the proper exposure has been achieved. While TTL is effective for most macro photography there will be times when it will come in handy to be able to manually control the light output of your strobe. At a minimum, your strobe should provide the ability to manually set output to full or 1/2 power.

A strobe's Guide Number (GN) is important because it will help you to determine whether or not you have enough light to illuminate your subject.

Manufacturers rate a strobe's Guide Number by determining the maximum distance (on land) that a subject can be effectively illuminated by the strobe.

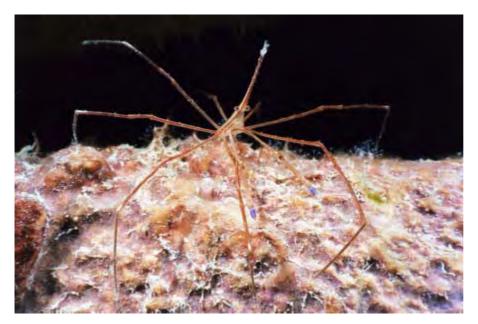
Because light is more rapidly absorbed by water, the actual GN for a strobe underwater will be lower than what is reported by the manufacturer, typical half the

rated GN when used in clear tropical waters.

Finally, if you plan to use a dual strobe setup it is important to select your strobes with this in mind. Dual strobe photography is typically handled by using a primary strobe, referred to as the "master", and a secondary strobe or "slave". The master strobe is used as the primary source of illumination for the image while the slave "fills" the image and softens shadows that are created by the master strobe. One method of slaving involves connecting both strobes to the camera's bulkhead using a dualsync cord. A second method involves the use of a light-sensor on the slave strobe that notifies the slave to fire and quench when it senses the master strobe's illumination.

Dual Strobes

While it is possible to shoot excellent macro photographs with only one strobe, the



Arrow crabs are a common macro subject although they can be difficult to photograph well as they blend easily into their background. (Macro 2T Lens, 1/125th at F22)



Ultralight balljoint arms allow almost unlimited control over both strobes positioning

addition of a second strobe to your kit will open up a variety of new and interesting lighting techniques not available with a single strobe. There are some technical reasons for the addition of the second strobe to be considered. For example, aiming two strobes at the same point will have the effect of nearly doubling the amount of light striking that point during an exposure. The real benefit of

using a second strobe is the added lighting flexibility offered. For example, by positioning the second strobe further away from the subject, and at a different, the second strobe can be used to "fill" in shadows and enhance the image's color.

There are some issues to consider when pondering whether using one or two strobes for macro photography is ideal for you. Cost, as always, is an issue. The addition of a second strobe can be an expensive proposition requiring you to purchase additional sync cables and strobe arms, as-well-as the second strobe. The second strobe, strobe arms, and cables will also add to the system's overall size and bulk, both on land and while swimming underwater. It is easier to start with a single strobe and purchase a second strobe when, and if, you decide it is necessary.

Strobe Arms

One of the common mistakes that I see among macro photographers is the mounting of a single strobe on rigid arms like the Sea Arm IV (Sea & Sea), or the standard Nikonos SB-105 arm. These strobe arms are not designed for macro photography and create long strobe-to-subject distances and lighting angles that lead to poorly exposed images with harsh shadows. The key to lighting macro photographs is to get your strobes close to the subject. One method of accomplishing this is to use an arm like Sea & Sea's Mini Shoe Arm, or the larger Hot Shoe Arm, that mounts your primary strobe to the camera's accessory shoe. This positions the strobe directly in front and above the subject, ideal for lighting macro subjects. Accessory shoe arms are also easy to remove from the camera should you decided to handhold your strobe.

When using two strobes your mounting options become a bit more complex. If your system is going to be used primarily for macro shooting the best setup is to have your primary strobe mounted to the camera's accessory show and the slave



This portrait of a seahorse was shot using dual strobes. The primary strobe was set to TTL mode while the second strobe was set to Full Power to help illuminate the relatively dark background. (Macro 2T Lens, 1/125th at F22)

mounted on a strobe arm using ball joints (also referred to as "ball arms"). There are three basic types of strobe arms currently on the market, ball arms, "tube arms", and a type of arm that some people refer to as "bendy arms". Of the three types of, the ball arms provide the best combination of holding power and flexibility in positioning your strobes. All three types of arms can be added to your camera using strobe tray that mounts below the camera body. Adding a handle to the camera's strobe arm tray can go a long way towards making your overall system easier to handle. Several manufacturers produce excellent strobe arms including Sea & Sea, Ultralight Control Systems (www.ulcs.com), Aquatica TLC (www.aquatica.ca), and Ikelite.

Reflectors

There are some ideas that are so simple, yet ingenious, that they often go overlooked. The

use of reflectors in underwater macro photography seems to be one of these ideas. Simply stated, a reflector is a panel of "reflective" material that is used to bounce light from a strobe towards the subject.
Unfortunately, at the present time there are no manufacturers producing reflectors specifically for underwater use.

As a firm believer in the idea of not reinventing the wheel, my recommendation would be to look at Aquatica's Framer Enhancers product (http:/ /www.aquatica.ca/ - listed under Nikonos Accessories). Although Aquatica is no longer making this product, the Enhancers were cleverly designed to attach to framers and provide bounce illumination originating from beneath the subject. If you are looking for more flexibility in the positioning of your reflector you may want to consider using a "bendy" arm, like the Ocean Optics Multi Arm, as a mounting point.

Target Lights

Target lights are small dive lights that can be easily mounted on your camera system to simplify the process of composing pictures during night dives. The ideal light will be compact and take two AA or AAA batteries. Larger, brighter target lights can often have the unintended side effect of scaring off more mobile subjects. It is also worth noting briefly that there are several models of strobes on the market today that come with built-in target lights like Sea & Sea's YS-350TTL/ Pro, Subtronic's Alpha and Mega series of strobe, and Ikelite's Substrobe 200 and 400 models.

There are a number of ways to mount a target light on your camera system. One method that I have used with acceptable results is to attach the light to a strobe using the old rubber legs strap off of a dive knife. If you prefer something a little fancier, most strobe arm manufacturers make accessory adaptors for their arms that allow you to attach target lights in style.

Final Thoughts

The process of assembling any photographic system is a highly personal one based on each photographer's personal preferences and experiences. Once you have the basic knowledge of the type of gear on the market you should take some time to study what other photographers are using. Ultimately it will take some time and experimentation on your part to settle on your ideal macro system.

Craig A. Vitter

Book reviews

Journey under the sea by Linda Pitkin

This 48 page, slightly larger than A4 size book, is aimed at the younger reader and for the more mature book reviewer like myself, the larger typeface made for comfortable reading.

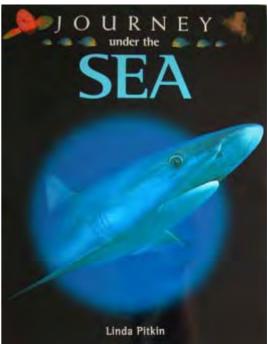
Journey under the sea is lavishly illustrated with Linda's excellent photographs from around the world and it does exactly what its title suggests.

Beginning with 'Breathing underwater' we learn how we can explore underwater with modern scuba and snorkelling equipment and then Linda takes us on an underwater journey

describing meadows, coral gardens and reefs, survival, colour, camouflague, octopus & cuttlefish, co-habiting, hidden creatures, seahorses, manta rays and reptiles.

Different types of dives are described including night and muck diving and no such book would be complete without a final chapter on Seas in Danger.

All in all, Journey under the Sea is a pleasant, informative read which I think the younger



reader will find fascinating and inspiring.

Journey under the Sea costs £7.99 and is published by Oxford University Press. www.oup.com

Great British Marine Animals By Paul Naylor

Great British Marine
Animals contains over 350
colour photos and should be able
to help you identify almost any
animal you come across in
British waters.

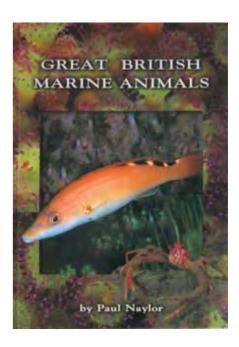
240mm x 170mm and 235 pages, it is a comprehensive and well illustrated book. Chapter headings cover Sponges, Cnidarians, Worms, Crustaceans, Molluscs, Bryozoans, Echindoderms, Sea squirts and finally Fish.

The photographs are very good for marine identification and the accompanying text is very informative, providing you with a thorough grounding without being too textbook.

Great British Marine Animals will appeal to those who want to learn more about their subjects.

The price is a very reasonable £14.

Paul Naylor website is www.marinephoto.co.uk



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Underwater Photography

a web magazine uwp@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, wreck photography 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 with leading underwater photographers

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

My e mail is peter@uwpmag.com

How to submit articles

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

- 1. The text for the article 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:

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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

This should result in images no larger than about 120k which can be transmitted quickly. If we wan larger sizes we will contact you.

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

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