

Underwater Photography

a web magazine

Jan 2002

Great white sharks

Andy Belcher

Available darkness

Reef hooks

Bull sharks

Sudan

Diver shots

Nikonos survival

Basking sharks

Clown fish

Experimenting

Classifieds

Precision engineering

NX-100 PRO

It's a fusion of precision engineering and 21st century technology, aesthetically sleek and luxurious as a sports car, the new NX-100 PRO housing for Nikon's F100 camera. The F100 is a professionally-oriented AF SLR camera incorporating the same advances in auto focus technology as Nikon's preeminent F5.

Sea & Sea's new NX-100 PRO makes this sophisticated camera available to professional underwater photographers and anyone who wants to shoot like one.

An ergonomic configuration of exterior controls and Sea & Sea's one-touch self-locking button system assure adroit operation of the camera's dynamic autofocus module and new 10-segment 3D Matrix Metering. Both the thumb-controlled focus area selector and the AF lock lever are at your service without taking your hand off the grip or your eye from the viewfinder.

Constructed of lightweight aluminum alloy, its titanium-tinted silhouette is defined by hydrodynamically fluid lines and smooth contours

Built-in circuitry for a shutter-activated focus light, dual bulkhead connectors, built-in battery powered leak detector and Sea & Sea's Quick Shoe for one-step camera installation.



The LCD window is positioned at an angle; this eliminates vignetting and amplifies read-out clarity. An illumination button lights up the LCD panel for viewing in low-light situations and during night diving.



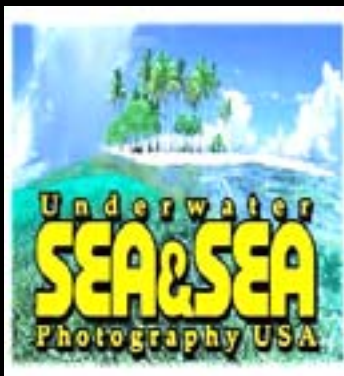
The camera's AE/AF lock button is located on the right. On the housing, via a remote-control innovation, this control is located on the left beside the grip, freeing the right hand for the shutter release.



The focus mode selector operates the camera's M/S/C switch, which permits you to switch between manual, single servo, and continuous servo focus modes underwater.



The accessory shoe accepts a shutter activated focus light for improved autofocusing in low-light conditions or a small strobe for macro photography.



This accessory bulkhead connector dedicates with a shutter-activated focus light.



Dual bulkhead connectors dedicate the camera for multi-strobe photography.



One-touch-self-locking buttons operate auto bracketing, film speed and flash sync mode.

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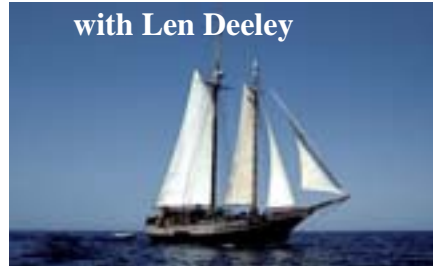
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Travel

Travel to magical destinations where you can discover underwater worlds that will challenge and sharpen your 'shutter bug' skills. Marvel at the medley of marine life presented, from macro to wide angle, explore the world and her oceans with our experience as your safety net. All you have to do is get the perfect shot...we'll do the rest.

*Let Our Experience
Be Your Guide...*

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1-415-289-1760

**www.reefrainforest.com
USA**



Photo Courtesy of: Doug Richardson

The Nikonos V

A Statement From Ocean Optics



It is now official that the Nikonos V camera is to be discontinued following a final production run of 3000 cameras.

As users of the Nikonos system ourselves, and as dealers whose name has been synonymous with the Nikonos line since 1976, we very much regret Nikon's decision.

However, once Nikon confirmed the news we immediately made a significant investment in Nikonos V bodies, lenses and strobes.

Ocean Optics Ltd, our sister company which has provided servicing of the Nikonos for a quarter century has also stocked up heavily on spares to ensure continued aftersales to existing and new owners. We will continue to manufacture our close up lenses and macro tubes as we have done for over two decades.

We hope this makes our continued commitment to the finest underwater camera ever produced unambiguous!

**The Ocean Optics Team
London**

News & events

Beneath The Sea



BENEATH THE SEA's 26th Undersea Exposition and Dive Travel Show will be at the New Jersey's Meadowlands Exposition Center in Secaucus, New Jersey March 22nd, 23rd and 24th, 2002.

The largest consumer diving event in North America, this year BENEATH THE SEA will have 300 exhibitors from all corners of the world, over 60 seminars by specialists and industry experts, diving demonstrations, exotic destinations, social events, and workshops, to entertain, inform and excite the experienced diver, new diver, and entice non-divers into becoming divers.

Stan Waterman, world renowned videographer will be there to host the Saturday Night Film Festival - Ralph White, the man said to have more time on the bridge of the Titanic than its Captain, will be on hand to bring new insights into deep, deep diving - Jack and Sue Drafal will be there to show their latest slide/digital/video extravaganza and keep everyone up-to-speed with the latest in underwater photography . and that's just the beginning.

The Women Divers Hall of Fame will host a series of events at Beneath the Sea, the place where it all began.

Ocean Pals, Beneath the Sea's children's program, will honor the winners of this year's poster contest and host a children's party all day Sunday.

For more information call

1.914.664.4310, e-mail
info@Beneaththesea.org , or visit
our web site:
www.Beneaththesea.org

Maria Hulst & Bob Ricke
Mediahouse@att.net

Red Sea trip with Len Deeley May 2002

Len Deeley is leading a special trip to the Northern Red Sea wrecks in May 2002.

For further details go to <http://www.imagine-photography.co.uk/northernredseatrip.htm>

Underwater photo weekends in the UK with Martin Edge

Fed-up of the same old mistakes? Failing to improve? Then Martin Edge, author of the best selling instructional book 'The Underwater Photographer' guarantee's that he can improve your images. Martin has sheduled three weekend underwater photo-courses for 2002. The dates are 19th - 20th January. 23rd - 24th February. 16th - 17th March.

Using an indoor heated swimming pool in a Bournemouth Hotel, the weekends are structured to the needs of each individual participant. Your own camera equipment is preferable, however hire facilities may be avialable. E6 film processing is included in the course price of £165.

Previous students will be pleased to hear that two themed courses are being planned for late 2002. These are a SLR/Housing course and a Composition course.

For more details Phone Martin or Sylvia on 01202 887611 or e mail

Martin.Edge@btinternet.com

Mark Websters Red Sea and UK Workshops

Oonasdivers have just announced the 2002 dates for Mark Webster courses. They are as follows:

Red Sea
14-21 June 2002, 11-18 October 2002, 18-25 October 2002
Contact Oonasdivers 01323 648924
info@oonasdivers.com
www.oonasdivers.com

Beginners Week-end Workshops at Porthkerris:
2/3 March 2002, 5/6 October 2002
Contact Porthkerris Divers 01326 280620
lisa@porthkerris.com
www.porthkerris.com

Four Friends expedition South China Sea 15-31 March 2002

There is an opportunity to join an exploratory trip to remote areas in the South China Seas where divers rarely go, not an advertised package tour where you dive in the same spots as thousands before you. This is an adventurous trip organised by Major Andy Reid, leader of many such diving expeditions including Bikini Atoll.

The group will sail from Singapore on the new yacht Four Friends with Captain Warren Blake, Master Mariner, Marine Historian and Archaeologist who has nearly thirty years experience of diving the reefs and wrecks in this area.

Underwater photographers and marine biologists are understood and are treated sympathetically.

Cost will be about £1650 per person for flights and all costs while at sea including good Asian and European food, drink and unlimited diving.

Contact Mike Ballentyne
Tel & fax : 01452 814 338
e-mail: mike.ballentyne@virgin.net

New products

Sea & Sea YS-90 DX

Configured like its counterpart, the popular YS-90TTL Duo strobe, the YS-90DX is compact and lightweight, constructed of high-impact polycarbonate. It bears the same prism diffuser, projecting an ultra-wide, even beam. But the YS-90DX goes beyond dual system capability; it is the world's first submersible flash to have intuitive circuitry with triple-system compatibility. A traditional four-pin sync cord synchronizes it with the Motor Marine II-EX. A traditional five-pin sync cord synchronizes it with Nikonos and housed Nikon systems. And the new Sea & Sea fiber optic cable synchronizes it with digital still cameras.



When used with a traditional sync cord, the YS-90DX operates in TTL automatic, slave and manual modes.

When used with digital cameras via an accessory fiber optic cable, the YS-90DX is slave-fired. The YS-90DX responds when the camera's built-in flash is fired. Some digital cameras have a pre-flash to measure subject distance and available light, some fire only once. The YS-90DX can be set to fire when you want it to. It operates in manual mode only. Total manual flash exposure is achieved by means of the strobe's unique 12- option light level control dial.

Specifications

Exposure control: TTL and Manual, with 12 light-level options. Beam angle: 105° x 95°

Guide number: (ISO 100, land) 72/22 (ft/m) (full power) Color temperature: 5500°K

Recycle time (full power): 200 alkaline, 120 Ni-cad Power source: Four AA alkaline or ni-cad batteries

Dimensions: 115 x 88 x 175mm/4.5 x 3.5 x 7 inches (H x W x D) Optional: Fiber optic cable 58040

For more detail visit <http://www.seaandsea.com>

Ikelite SubStrobe 125

The all new SubStrobe DS-125 features special electronic circuitry for use with the newest cameras, providing both TTL capability and the ability to also provide preflashes when used with their Wireless TTL Slave Sensors.

The DS-125...digital was created especially for use with new digital cameras, but is completely compatible with current film cameras including the Nikonos and all of the newest Nikon systems.

Specification:

Guide # 32 underwater (ISO 100) Full power recycle time of 1 second TTL, Full, 1/2, 1/4, 1/8 powers. Fuel Gauge. Modeling Light. Audible Ready Signal. 90 degree angle of coverage.

Diffuser to cover 100 degrees

1.5 hr Smart Charger available. 150 flashes per charge

Charger not included. Interchangeable NiCad battery pack

Weight complete less than 3 pounds

For further details go to <http://www.ikelite.com>



Ikelite housing for Olympus Digital Cameras 2040, 3000, 3030, 3040, 4040 Zoom Models

Compact new housing that extends all of the capabilities of these Olympus digital cameras underwater. The LCD information window on top of the camera is easy to see as is the LCD monitor. Every camera function is accessible.

The housing includes a flash diffuser that allows underwater photos to be taken with the built-in strobe of the camera. An optional DS series Ikelite SubStrobe placed farther from the lens improves the photographs by reducing the illumination of particles suspended in the water.

The Ikelite Digital SubStrobes and TTL Slave Sensors provide complete compatibility and duplicate the automatic exposure dictated by the camera. This is the only strobe system that can duplicate the sophisticated flash and preflash automation of these Olympus cameras.

The heavy duty 3/8" thick wall housing is moulded of corrosion free clear polycarbonate and operates safely to 200 feet. Camera and housing complete weighs less than 6 pounds.

Lens port allows attaching the optional wide angle lenses offered by Sea & Sea and Inon.

Single Release Handle system allows easy attachment and removal of SubStrobe mounting arms at the touch of a button.

Housing measures 7" wide including knobs; 10.5" wide with the removable handle bar attached; 6" high; and 6" deep including back knobs and port.



Amphibico 10 Video Arc light



Amphibico VLAL0010 Video Arc light comes with an adjustable ball joint extension arm, and includes a pistol grip so it can also be used as a dive light. The 10 watt HID Metal Halide Bulb is powered by 2 NP-F550 SONY Batteries (not supplied).

The output light of an HID lamp has a color temperature of 6000°-7500° Kelvin which is daylight condition temperature. This is significantly higher and much whiter than that of a typical quartz-halogen light. As a result the HID light is a preferred source for underwater video.

For further details contact Amphibico, 459 Deslauriers, Montreal, Quebec, Canada H4N 1W2 - Phone: (514) 333-8666 / Fax: (514) 333-1339 info@amphibico.com

LIGHT & MOTION

Light & Motion and Aggressor Fleet have teamed up to make capturing that perfect vacation easy.

Light & Motion underwater imaging equipment is now available on many of the Aggressor Fleet vessels. For a schedule of trips and where you can find instruction and demo gear, visit

www.livedivepacific.com/celebrity.html



Sealux-CX 990 housing for Nikon Coolpix 990

The Sealux CX-990 housing is a perfect fit for the digital camera Nikon Coolpix 990 digital.

The housing is made of non corrosive aluminium, hardened, all-anodised and is optimally protected against salt water.

The housing is 185 x 119 x 116 mm and weighs 1.6kg in air but is neutral underwater

Two quick-action latches with safety locks secure the housing.

Two ports are available - Flat port and a special port: for the wide-angle lens WC-E 63

Flash connector: Nikonos compatible

A handle base plate are

supplied with a soft rubber handle and t-connector for flash arms

The monitor can be viewed with protection against daylight which is why you always have a good monitor view.

Display: all data is visible

View finder: even Focus- and Flash-LEDs are visible

Pressue tested to 90 m.

All 16 switches of the Coolpix 990 can be handle with the housing!

The price is approx 2500 DM.

For further details visit

<http://www.sealux.de>



UK-DIGITAL -CANON EOS D30



The UK housing for the Canon EOS D30 is CNC machined from solid aluminium and hard anodised .

The interior is fitted out in a black lining which can absorbshocks and moisture, if necessary.

With two self-securing pre-tensioned latches, the housing is closed quickly and safely.

Changing memory chip cards is possible without removing the camera.

Controls are included for

Shutter release, zoom, front hand wheel, flash + -, drive, AF-WB,

mode, info, magnifier, menu, jump,, cancel, set, AF-measuring, rear hand wheel.

There is an S6-Flash-connector with camera connection, as well as display window on top and monitor window behind.

The housing is equipped with the reliable UK Bajonet system. It allows use of various lenses with the corresponding front ports.

Dimensions:

Length (without grip): 210 mm, height: 200 mm, depth: 115 mm.

Weight: approx. 2700 g without port.

Max. diving depth: 80 metres.

For further details visit

<http://www.uk-germany.com/>

Sea & Sea Quad port from Ocean Optics

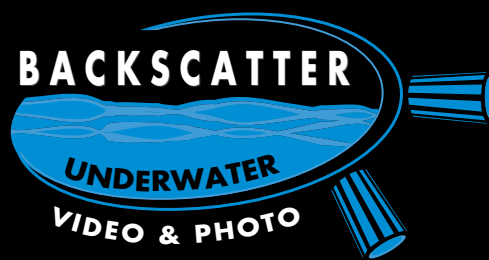


A special port is now available from Ocean Optics onto which the Inon Quad flash can be mounted and secured.

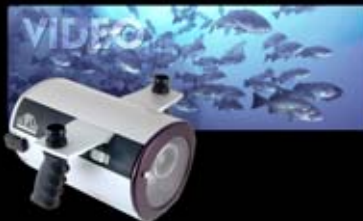
The bayonet mount port is machined from aluminium and is hard anodised black.

The Quad port can be used without the Quad flash and, due to its smaller outside diameter allows easier positioning of your flash for close ups.

For further details contact
Ocean Optics,
13 Northumberland Avenue,
London WC2N 5AQ.
Tel 020 7930 8408 Fax 020 7839 6148



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Andy Belcher

by Ross Armstrong

New Zealand photographer Andy Belcher has won more than 80 international photographic awards including the Australasian Underwater Photographer of the year title (twice) and overall first at France's Okeanos and Antibes Festivals, California's UPS and New Zealand's Oceans photo competitions and a first place in the 1997 British Wildlife Photographer of the year competition. In the 1994 CMAS international 50 Judges Contest, Andy was named one of the world's top four professional underwater photographers.

What got you started in underwater photography?

Not long after we got married Angie and I went on holiday to Australia and we ended up taking a cheap flight to PNG. We were both divers and that was really our first taste of real tropical diving. I something in my head just went "photos". That's the only way really that I can describe it, I'd hardly ever taken a photo before and knew nothing about photography. When we came home back to New Zealand I decided that I had to take photos underwater.

That was in 1984. I bought a second hand Nikonos IVa with a 35mm lens.

Knowing virtually nothing about photography I went into the water with a Nikonos and set it on automatic and started taking pictures. Most of them were rubbish. Amazingly I actually won a medal at in New Zealand's Oceans



All underwater images taken with Nikon 801s, Nikon 16mm fisheye lens in a Nexus housing with two Nikonos SB104 strobes on TLC arms. Fuji Velvia film rated at 100 asa.

competition with the first roll of film I put through the camera. It was a topside photo of Angie running along the beach with all the water droplets coming down. That

made me all enthusiastic because I thought "Cor, I've only just started and I've won a prize, maybe I can do this photography thing after all".



This shot won a third in the Nikon photo contest international 2001.

Did you upgrade your camera gear as you progressed?

I made a slow progression through to all of the Nikonos lenses, working up to the next expensive one each time. I bought a 28mm because I thought it would be heaps better and it was. I really wanted a 15mm lens but I could not afford one. After a few years I bought a second hand 20mm lens.

I think my photos really started to improve dramatically when I got the 20mm. Most people did not know I was using a 20mm, they thought I was using a 15mm. They made that assumption because some of the shots I was getting with the 20mm were equally as good as what you could get with the 15mm. I updated my strobes so I had a SB102 and SB103, the smaller one was for fill lighting and I started to take much better pictures once I started using that combination.

So I don't think the equipment is absolutely everything. In a lot of situations it can give you an advantage. I think you could buy a Nikonos III, an old style 15mm and one strobe and take some awesome pictures.

With no prior photography knowledge, how did you develop your skills?

I read books. I bought a book by Jim Church called 'The Nikonos Handbook' and I read it from cover to cover again and again and again until I thought I was starting to master that Nikonos system. The technical aspects of photography did not come easy to me; in fact I really struggled. It's only four or five years ago that I've really understood the relationship between apertures and shutter speeds and how they work together.

How important do you think understanding the technical aspect's of photography is?

I think you do need to learn the technical side of photography but I also strongly believe that there is an incredible amount of talent or artistic creativity involved in photography that maybe people overlook. I think I'm quite a creative photographer and I can see a picture before I've taken it.

The hard bit is getting that image onto the film –that takes the

technical skill.

People were saying to me "You're not using TTL are you? - You've got to learn how to do it manually" and I thought "Oh no here we go, I don't even know what a shutter speed is for". But once I forced myself to start doing things manually I got dramatic improvements in my exposures.

How much do you plan shots in advance?

With underwater photography I think you have to be ready and trained to make the best of the moment when it happens. You've got to develop your own technique so that you're ready for what happens or you make it happen to the best of your ability. The difficulty underwater is that things are constantly changing, two days can go by and everything is different – the tide has changed, the fish are doing something else or whatever. Sometimes you can go back and get a shot but really you must try and make the most of each situation as it arises.

What do you look for in a photograph that you are about to take?

To use Darryl Torckler's classic term, I look for the "wow factor".

Sometimes there is a photo to be taken but it doesn't excite me, I can recognise that now. I think in the early days I would just bash away and shoot lots of film. I would keep shooting and bracketing and try different angles. I still do that to a certain degree although more so on a commissioned photo shoot than when I'm shooting for myself.

How much do you follow the accepted rules of composition?

I took a lot of notice of the rules at first. Over and above that I really just experiment. I have always thought outside the norm



Did you make any major break-throughs when you were starting out?

One major break through was when I trained myself not to worry about the cost of film. In the early days we were really struggling financially and I was spending all this money on camera gear, and it was lots. But I would hold myself back on film because I would think it was costing me heaps – so many dollars a roll then the processing and mounting.

Suddenly one day I thought “What the heck”. We were starting to sell a few pictures and I started to shoot everything I wanted to shoot. That’s when I started taking lots more good quality pictures because I was not worried about it.

I think changing to a housed SLR was another break through. It certainly was a break through with composing my shots, because composing wide angle shots with the Nikonos, especially working close is very difficult due to parallax error. When you pick up a housing and you are actually looking through the lens you can see whether your picture is in focus or not.

Do you think you need to shoot a lot of film to get good results?

Within reason, yes. But I think you can get to a stage when you come through that. There is another very common mistake with underwater photographers, which is to swim up to something, take one picture of it and move on. That never ever works. Unless you are incredibly lucky you will never get a good shot like that.

If I see something that I think looks really awesome, I know that if I take the whole roll of film and spend my whole dive here the chances are I will get one really awesome shot.

and if something fits best right in the middle of the frame, that’s the way I shoot it. You can break any of the rules. There is so much creative stuff you can do, not only with composition but also with

techniques such as slow shutter speeds and panning. It allows you to represent how you perceive what you see.



Is there anything that you credit your success to?

Being different with subject matter and composition. Maybe one of the reasons is that I feel I am able to see things that others don't see or at least don't appreciate. Stuff like looking through the surface with the Snell's window effect and reflections. Some people I feel will never ever see that. But I know that moving up or down or by getting into exactly the right spot I will get this awesome reflection. I have trained myself to look for the best angle or the best time to take a shot.

Underwater I think people are afraid to experiment with lighting angles. You've got to get your strobes out and move them around. Very early in my photography I discovered the brilliant results I could get by trying my strobes at different angles.

What advice would you offer someone starting out in underwater photography?

Let your imagination go wild because anything that is out there you can get on film. Train yourself to photograph with your eyes.

Before you ever pick up the camera look at your subject and decide for yourself whether or not it will make a good shot.

Andy Belcher

interviewed by
Ross Armstrong



Website:

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NiteRider HID Video Lights by Dive Lights International

HID (High Intensity Discharge) Video Lights now available!

The HID Video Light is the latest development in underwater video lighting. It is a twin 10 watt, 13.2 volt video lighting system equivalent to 80 watts of conventional light with 6000° K. color temperature that is closest to sunlight. Built in diffuser lenses provide soft, well-balanced lighting. The twin single beams are perfect for shooting wide angle and macro. The two articulating video arms mount readily to any housing using the included mount balls (attached with provided *** - 20 screws). The compact NiMH battery provides 1.9 hours of burn time, plenty of time to capture all the video footage you need.

Under-housing mount NOW AVAILABLE!

Under-housing mount bracket for NiMH battery Designed exclusively for use with Gates video camera housings

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White Shark Diving - South Africa.

with Nigel Motyer

I'll never forget the first shark I saw. 1985, 30 meters down the drop off at Ras Mohamad a grey reef shark left a pack of about seven or eight sharks swimming out in the blue and cruised in to take a look at me. It passed about four feet from me. I was totally absorbed by the experience and have been fascinated by sharks ever since. Over the years since a good portion of my dive travel has been focused on seeing and photographing these amazing animals.

Of course the grand daddy of all sharks is the Great White and they had always been something I had wanted to see. At the time I first started looking into these trips Southern Australia was really the only place where tourist divers could get to see Great White sharks. Peter Gimble had put Dangerous Reef on the White shark map in his 1971 film Blue Water White Death. This was an area that had reasonably clear water and big sharks, 5 meters and more - but the cost of these trips has always been ridiculous.

When Jaws came out in 1975 and made the Great White public enemy no one, sport fishermen all over the world wanted to add this shark to their list of conquests and as the fishermen arrived sightings on Dangerous Reef became very unpredictable indeed. Even today it is not unusual to spend several thousand dollars for a week at sea and see no sharks at all.

So in the mid nineties when word started to get around on a place in South Africa that had plenty of White sharks divers started to take an interest.

Today in the small coastal town of Gansbaai, about two hours east of Capetown, quite a respectable tourist industry has



South African Coast near Hermanus Bay. A spear fisherman was taken by a White shark off this point 4 days before we arrived.....they found his spear gun a few days later !

grown up around the White Shark. The South African authorities have recognised the value of the local shark population to the economy of the area and became the first country in the world to formally protect the great white shark. Consequently the shark population here is quite strong and the number of sightings by the tourist boats is going up every year. As a bonus to the tourist diver the weakening

economy in South Africa has meant that in comparison to trips to Southern Australia, white shark diving in South Africa is now both much cheaper, and much more likely to turn up a shark. While there I met a diver who told me he had spent over ten thousand dollars in Australia trying to see white sharks with no luck only to come to South Africa and see five on his first day. On the down side though



I never used any flash underwater - the boat crew thought it might spook the shark and bouncing around inside the cage it would be hard to handle.



Geyser Rock with Cape Fur Seals - Southern Side of Shark Alley.

in South Africa the sharks tend to be smaller than the Australian ones and the underwater visibility tends to be worse....and its not a good place to go swimming either.

Speaking of swimmers, what keeps the sharks in the area is of course a steady food supply. About 10 km off shore there is a small

island nature reserve called Dyer Island. About one hundred and fifty meters to the south of the island is a rock outcrop called Geyser Rock. This rock is home to twenty thousand Cape Fur seals, a favourite delicacy of the white shark, hence the steady shark population. There are six dive operators who currently

have a licence to operate around Dyer Island. All of them launch from a small slipway in the town of Kleinbaai about five miles away from Gansbaai. Certainly some of these operators are better than others. We chose the White Shark Diving Company which has a good solid boat with a covered cabin - which we found in valuable in the conditions. I'd be happy to use them again or recommend them to others - they seemed to me to be the best operation.

The sharks are around all year but the peak viewing months are July to September. Which is a shame as the best visibility and weather is in December and January, but at that time of the year the seals are giving birth and the sharks have plenty of easy prey in the young seal pups and aren't as interested in the chum slick put out by the boats. We travelled in August, the best month for sightings but the weather can be dodgy. True to form, the day we arrived a front blew through which really stirred up



the water and dropped the air temperature below what I was expecting - bring a warm rain proof jacket if you thinking of going. Sea conditions for us on day one I thought were going to be too bad to launch. In fact we did go out but ours was the only boat to make the crossing to the island that day and it was not for the faint hearted. The swells were huge and the boat was airborne for most of the crossing. As a result the underwater visibility on that day was zero, it had been ten meters the previous week - isn't that always the way !?? We didn't even put the cage in the water.

Having said that, it was the best day for surface shark action with several sharks around the boat most of the day - at one point even biting down on the dive platform. To top it off, a southern Right Whale swam past us about twenty meters off the stern. Photo opportunities topside are often better than UW.

To give yourself the best chance of seeing sharks its best to

plan to spend a few days in the area. You get used to the routine on the boat and get to know the crew a bit better. This can be important as it is they who decide who gets into the cage first and for how long. We stayed six days in total although after the first four we took time out to fly up to Durban to dive with the Sand Tiger sharks on Aliwal shoal before returning back to Dyer Island for a couple more days. As it turned out this was a great decision as we returned to much calmer water, 14 meter visibility and loads of sharks and virtually had the boat to ourselves for the last two days.

Departure time for the boat is tide dependant, lunch and soft drinks are provided on board. The boat itself is a ten meter catamaran hull so it can handle up to ten people in comfort. It was powered by two 225 Hp outboards so travelling time to the island was half an hour or so. During our stay numbers on the boat varied from minimum of 4 guests up to 10 or 12. Not all will want to dive though and



Preparing the Chumstand well back !

some will only dive once, so time in the water is also a bit variable so it pays to get to know the crew to maximise your in-water time. I brought my own 8mm dive suit but



Film choice for underwater was Fuji Multi speed set to 400asa on all the UW shots.

suits are available on board if you want.

Once on site the boat is anchored somewhere in the channel between Dyer Island and Geysers rock - they call this channel "Shark Alley" as its here that the white sharks cruise up and down hugging the bottom looking for the tell tale silhouette of a passing seal on the surface. Anything moving on the surface here is liable to be bitten. We saw sharks biting floats, boats and bits of kelp to investigate them as a possible snack. Once anchored up there is a short briefing on the boat routine and the chumming starts. Its usually bits of frozen shark livers in mesh sacks which create a slick of oily fish bits down current of the boat. This slick can travel up to three miles off the back of the boat. Once a passing shark passes through it will zig zag up the slick back to its source. Once chumming starts larger pieces of



The White Shark Diving Company's boat - shot into the sunrise - note the cage on the back and the flying bridge view area.

shark meat are hung from the back of the boat, this gives the shark something to hold their attention at the boat.

Its anybody's guess how long it will take the sharks to turn up. For us it was anything from five minutes to four hours but we never had a day with a no show. Some

days we had up to five different sharks with three sharks at the cage at one time although we were told that was unusual. Once the sharks turn up the crew will assess their mood and see if it is likely to stay - if so they put the cage in the water and gear up the first two divers.

The cage design is the same



The 20mm was the best lens to use as it was easier to get more of the shark in the frame

for all operators - a cylinder of stainless steel with a viewing port two thirds up and a trap door lid. Ours floated a little out of the water so you could surface above water level if you needed to. I found this really useful as it allowed you check back with the boat on the sharks location, but not all operators had this facility in their cages. The cage is tethered to the boat by two ropes and takes only two divers at a time. Interestingly the air supply is fed from a bottle on deck of the boat - they say this is to allow them turn off the air on divers who won't come up when requested. I did ask what would happen if the shark bit through the hose - "dunno - its never happened" was the not very reassuring reply - either way it seems to work well.

Getting into the cage for the first time is certainly a study in concentration. That jump from the boat through the trap door on the top of the cage is not one you want to get wrong.

Once in the water you do tend to bounce around a bit inside the cage and it may take a while to get used to keeping out of the way of your cage partner and their air hose. With no fins and a really heavy weight belt you do tend to stick to the floor of the cage but there is also a small rail on the floor of the cage to tuck a foot under which helps to keep you upright. I usually had two camera housings with me which did hamper me a bit. It definitely helps to have one hand free to brace yourself against the cage.

Your field of view in the cage can be quite restricted both from the cage itself and the limited visibility. I found I tended to stare off in the direction I last saw the shark swim but White sharks are incredibly stealthy and would often double back behind the cage so often your first view of the shark would be when you swung around to find its head is two feet from your face. Its hard to describe the adrenaline rush of seeing your first

white shark in its own element. We saw many sharks over the week but I never tired of it. The length and power of these animals is just so impressive but its the girth of the shark once they get over four meters that is most surprising. Our biggest sharks were in the 5 meter range but they do come bigger than that. There is also much more life in their eyes than is normally portrayed - you can clearly see it follow you as it swims by the cage. I did notice that a lot of the sharks adopted a routine around the cage. They would often swim a circuit three or four times around the cage so you could predict to some extent where they may show up next. This was useful as it allowed you plan your next shot to some degree.

Photographically the trip was very challenging. My surface kit was two camera bodies (Nikon F90's) one with a 24mm and one 70-200mm zoom.. If I was doing the trip again I would take a smaller range zoom - something in the 28-



Having said that I liked having the choice and the ability to alter the view of the image by varying the lens - all the slides would have looked very "samey" otherwise.

I didn't use the 24mm underwater but the next time I would try that lens too. You have to work hard keep the other cage traffic out of the frame, buddies, air hoses and yourself, not to mention the cage itself tended to wander into a lot of my frames because I tended to press the button when the shark turns up rather than check the corners of the viewfinder before tripping the shutter.

Film choice for underwater was Fuji Multi speed set to 400asa on all the UW shots. Even on sunny clear water days I was glad of the extra film speed. I had the drive on the camera set to continuous - high at all times (after all film is the cheapest part of the trip). For metering I let the camera do it but I set the meter to centre weighted as I think Matrix doesn't work well with a wide lens underwater. There is too much of a variance in the exposure across the frame and something is going to loose out and as a result I think matrix metering underexposes the frame. Maybe its just cause I never learnt to use it correctly, anyway that is what I did.

I never used any flash underwater - the boat crew thought it might spook the shark and bouncing around inside the cage it would be hard to handle.

So would I recommend it as a trip ? - absolutely. Bring loads of film and some warm clothes !!

Nigel Motyer

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135 range. I felt the 24 just that bit too wide for a lot of the shots. Remember when the shark is at the side of the boat - so is everybody else so you can be shooting through, over and around up to ten other people. Good uninterrupted views of the sharks can be hard to get. Don't be hard on your pictures, remember also that white sharks are a very photographed animal. I know I tended to compare my shots with National Geographic front covers and in fairness - its hard to better David Doubilet all the time! Remember too that August is winter time in South Africa and on cloudy days light levels can be low so it was hard to get a shutter speed that would freeze the action. Of course hindsight is 20/20 vision and having

looked at the results of this trip there are a couple of things I would do differently next time. For some of the surface shots I would have a flash on the camera set down minus two stops just to put a little sparkle back into the shots - having said that the pictures may look dodgy doing that but I think its worth a try on a few rolls. I used Provia 100 on the surface often pushed to 200asa to get me that extra shutter speed. I think I would experiment with Provia 400 on the next trip too.

Underwater I used a two housings, a housed 801 and F90. Lens choice was either a 20mm or a 16mm fisheye. I suppose the 20mm was the best lens to use as it was easier to get more of the shark in the frame - the 16 is just so wide.

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Walkers Key bull shark experience

By Pete Horsley

Over the past thirty one years I have swam with sharks all over the world but none of these experiences could prepare me for what I found at Walkers Cay in the Bahamas.

It was a cold February morning when a select group of divers left for Walkers where we would be joined by the respected British shark expert Jeremy Stafford-Deitsch.

The idea behind this trip dreamed up by Jeremy and the tour operator Divequest was to introduce a limited number of divers to these creatures under a supervised controlled condition having educated them in the thought processes of these the apex predators. The divers, now members of the Sharks Trust, would become ambassadors for this much maligned species and on their return to the U.K. try in their own small way to pass on the facts about sharks and dispel the all too well known Hollywood image of these creatures.

Walkers Cay and the diving operations manager, Gary Adkison, have now a world famous reputation for what is called “The Chumsicle Dive”.

This consists of a refuse bin size block of ice packed with fish heads and other goodies that are irresistible to sharks being lowered to the sea bed while divers form a circle around it, huge numbers of sharks come in to feed on the bait and afford the divers the opportunity to interact with them and learn by their experience. The sharks while I was there were usually Caribbean reef and Nurse. This in itself would have made the whole trip worthwhile but we as a group were privileged to be allowed access to an area that Gary keeps off the normal tourist itinerary.



All underwater shots taken with a Nikon F100 in a Subal housing with 20mm lens. Ektachrome Elite film.

We were however lucky enough to be on the island while Ron and Valerie Taylor were making a movie and we had the chance to meet and talk sharks with them.

In two to three feet of water off the North coast of the island a large gathering of Bull sharks takes place each year. These animals are not captive or trained in anyway, they are wild and roam free. It was here that I experienced my close encounter with one of the most fascinating and misunderstood creatures of all time.

The Bull Sharks are described as being as dangerous as a great white and capable of eating almost anything and come within touching distance, they cruise around in an almost hypnotic effect just drawing

you into the water. Adrenalin takes the place of fear, or perhaps this is fear, if it is then there was no urge to run, quite the opposite in fact. I was drawn to be in the middle of the group and stroke them, swim alongside them and become one of their group. That first day was an unbelievable rush of emotions, all the time you are trying to reconcile that you are with one of natures most evolved predators, you are trying to remember everything that you have been told, respect, behavior and most important



Lemon Sharks will come into water that is only as deep as your knees with no fear of getting grounded.

observe what is going on, sharks do not attack indiscriminately, they will, like most creatures, give some warning as to their intentions.

Day one quickly passed into day two. The initial rush was over and we were settled and comfortable moving and working with these magnificent beasts. Little did I know that morning when I entered the water that I was about to have an experience that is the making of peoples nightmares, I certainly did not realise that by the end of the day I would be in a position to explain the nightmare and possibly calm peoples fear of the scenario.

As on every dive I was carrying my Subal F100 camera, we were wearing only skin wetsuits so there was no place to attach the camera lanyard, I slipped it around my wrist just for safe keeping, you become very attached to this expensive piece of kit as soon as you realise just what it is capable of producing. I moved about ten feet offshore in about four feet of water and began simply bobbing to the bottom to get images of the sharks as they passed between me and the shore, the visibility was not brilliant but good enough to see the sharks at about ten feet. Jeremy and Gary were onshore





overseeing the procedure and keeping the sharks attention by dropping the occasional fish head in the water. At this stage a magnificent nine foot Lemon Shark joined in and I was positioning myself to get a portrait shot with possibly the mouth open. Out of nowhere a fish head appeared in front me, my mind racing with what to do and what not to do, killing zone, not a good place to be, move away.

At lightning speed the Lemon took the bait in front of me and together with two large bulls barreled into me, I can still see open mouths and teeth in my whole field of view, the Lemon grabbed the camera which you recall was attached to my wrist, the Bull took my fin the third hit me square on and pushed me back into a fourth Bull, for three or four seconds all Hell broke loose and I was tossed around like a rag doll. As quickly as events took place it was all over and everything went calm, I did note however the other divers who were in the water with me were now at a respectful distance away from me now.

To an observer on shore I was attacked by sharks and was lucky to walk away with only teeth marks on the camera, but in the light of what I know now lets break down what happened. The sharks did not regard

me as prey, I was simply another predator in the water with them competing for food, they treat me as they would any other competitor, as they have no hands, they use their mouths to hold things and check if they are edible, the camera is painted silver and to a shark resembles a large piece of fish and well worth taking. The Bull shark knowing that my means of propulsion is my fins tried to nip them off thus stopping me from competing, he found them not to behave like flesh so he released. They generally bullied me to show their dominance and then left me alone.

There are ways and means of expressing your dominance during an event like this but that was lesson three the following day. Of course the whole thing wouldn't have happened had the fish head not been thrown so close but even in the most controlled of situations sods law is always present. A very valuable lesson from Gary. The old saying goes "Tell me and I will forget, Show me and I will remember, Let me do and I will understand". The experience of Walkers Cay has done just that, the learning curve was excellent, and the experience was brilliant. If it can be summed up in one word it has got to be "Respect".

It is without doubt one of the

most enlightening experiences I have had and drives home just how powerful and beautiful these creatures are.

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Pete Horsley

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DIVING THE SUDAN

with Len Deeley

The Sudanese Red Sea has a reputation for some of the greatest dive sites in the world and I was keen to see them for myself. Having dived many times in the Egyptian Red Sea and the Gulf of Aqaba my next trip had to be south into Sudan. I knew that Diving World offered such trips, so organised through them for a two-week photographic expedition and gathered together a group, including such well-known underwater photographers as Charles Hood and Pat Morrissey.

Firstly, I had to ensure that the skipper and crew appreciated the style of diving needed for a specialised photographic trip, namely the ability for divers not to be hamstrung by regimented diving but left to concentrate on their photography. Yassin Hussain of Diving World ensured that the message got through and we were ready to go.

To dive Sudan you need to accept that getting there can be a trial. However, the logistics were well prepared and in the event our journey went extremely well. The first leg was from Heathrow to Cairo, where we arrived after midnight on Saturday 9th June, only slightly behind schedule. Being a scheduled flight meant there was plenty of room on the Egyptair Airbus, even for my 6'4" frame.

We were met at the airport by Ahmed the Diving World agent, who whisked us through the formalities and the purchase of our Egyptian visa (\$15) in a matter of minutes. We then sped by coach to the Novotel Hotel, which is near the airport and agreed with Ahmed to kill time by taking a tour of Cairo later that day. This meant that our luggage got stored in the coach the next morning and we were able to



SY Ishtar



Nikon F90X, Aquatica housing, 16mm lens. Nikon SB26 and SB28 in Kevin Cullimore Housings. Fuji Velvia. Exposure Mode Manual

enjoy the day without worrying about its security.

In the event the trip was an absolute delight, enabling us to take in the Step Pyramid at Saqqara, the

Giza plateau, which includes the Kafra pyramid, the only one of the Seven Wonders of the Ancient World that still exists, and, of course, the Sphinx. We also viewed



Nikon F90X, Aquatica housing, 60mm lens, Nikon SB26 and SB28 in Kevin Cullimore Housings. Fuji Provia. Exposure Mode:Manual (aperture and shutter speed not recorded).

a recently excavated tomb and did a tour of a carpet and papyrus factory.

We hadn't even started diving yet and we were already exposing a fair number of films. I made a mental note that another holiday on the Nile was overdue. That evening we then arrived at Cairo airport for the next leg of the trip. Sudan airlines are not a byword for efficiency. However, the plane did arrive only 2 hours late and we were on our way across the tarmac to the plane, a rather old Boeing 737. Not fazed by the engineer in his oily overalls working on the port engine surrounded by oil cans, we got on board a plane that was, shall we say, mature.

Luggage that could not fit into the overhead lockers was stacked on the back seats, including mine. As I was sitting right in front of these seats I had visions of meeting my maker covered in yoghurt and goats cheese and an assortment of other items being taken to Sudan by the passengers, should the plane give up the ghost on the way to Sudan.

Of my own hand luggage I had no concerns about it becoming a missile if the plane did go down. Packed as it was with an assortment of my 'heavies' I would lay odds that, if the plane broke up, it would

be the second item to hit the ground, beaten only by my hold luggage, which was packed to a consistency of readymix. But I digress.

In the event the flight went OK, with passable food and allowing for the questionable condition of the toilets. Our agent in Port Sudan was Tico, who was there, ready and waiting, to again whisk us through the assortment of officials ready to make our life difficult. Customs were ready to check our luggage in minute detail, which we obviously could not bypass. However, after taking one look inside my hand luggage and case, I was waved quickly through. I reckon that, having seen all the batteries, gadgets and wires, he considered that, if it was going to go off, he didn't want to be in the vicinity.

We were through! A 1 hr drive to the harbour and we were then ferried out to SY Ishtar, our home for the next two weeks.

Oh what a delight to see a dive boat that looked like a real boat and not a fibre glass cork!

The SY Ishtar was built in 1992 along traditional lines with teak deck, iroko hull and oak keel. Twin masted, she provides a good spread of canvas as well as 300hp

engine. She is 22m in length with a beam of 5.6m and 70-ton displacement (for the nautical minded readers). The ten divers were accommodated in 5 en-suite cabins, offering relatively spacious conditions. Cabins are not air-conditioned but have natural ventilation and supplementary fans (although my fan broke down and could not be repaired during the trip). Even with fans a large number of the group slept on deck as the two weeks were in the high 30s C, with warm nights and little wind. The upside was that we had practically flat calm conditions for the whole trip.

Although fitted with a desalination plant, this was in repair in Sudan and, like anything else in Sudan, that takes time. There was plenty of bottled drinking water, although fresh washing water had to be conserved, meaning showers were a dribble.

Tico collected the 'Departure Tax' of \$200 a head, which is an annoying supplement that the Sudanese authorities has imposed on tourists. Hardly the attitude to encourage tourism.

Bright and early on Sunday we were off and made our first dives on the wreck of the Umbria, which is only about half-hour sail from Port Sudan, lying on Wingate Reef. A German built freighter, she was scuttled by the Italians in 1940 to stop her falling into the hands of the British at the time Italy entered the war. She lies on her port side with her stern at a few metres and the bows down at about 40m. Access is easy, offering plenty of opportunities to explore the interior of the wreck. She is well encrusted with coral growth and there are lots of fish around, including Yellowbar Angelfish, parrot, pipe, anemone and puffer fish. Some colourful nudibranches and clams can be found.

The skipper on the trip was a young Adonis by the name of Mattia Dzaja. Mattia alternates trips with his father, Josko, a Croatian

who used to be skipper to Tito of Yugoslavia. A charming character, Mattia soon loosened up to our style of diving, when he realised that, no matter what directions we were given, we would find our own photography space underwater. Diving was limited to about 40min if we wanted to get in three dives a day, or an hour with two dives. Not something we are used to but understandable when considering the distance of any form of decompression chamber and the difficulties a serious incident would have for a foreign skipper in the Sudan. As all of the tanks were 15 litre, this meant divers were coming back with plenty of air. I appreciated the additional flexibility given with these tanks, especially when working hard photographing such things as shoals of barracuda in fairly strong currents.

The Italian influence was noticeable with the food. Breakfast was continental e.g. bread and jam, and lunch invariably included pasta in all its shapes and forms. Cake and refreshments were served each afternoon and dinner would be meat dishes, or fish as the trip progressed and Osman, the seaman, would disappear in the rib to catch some fresh fish for the table.

By-passing Sanganeb, our next stop was Sha'ab Rumi, where we did several dives at the south point. This was our first encounter with sharks, which was to be a regular feature of many dives on the trip. White tips (*Triaenodon obesus*) and grey shark (*Carcharhinus wheeleri*) are common here and, if you are lucky Hammerheads. There are also large shoals of barracuda and a wide variety of reef fishes as well as soft corals. Smaller than the soft corals in the north, they are much more varied in their colours, reminding me of the soft corals in the Maldives.

There is also the opportunity to dive the remains of Precontinent II at Sha'ab Rumi. This is the underwater 'village' that in 1963 divers, led by Cousteau, stayed in for a month carrying out research into the effects of long stays underwater. Although the main accommodation block was removed after the expedition, the circular 'garage' for the research submarine and storage 'shed' are among the structures that still remain, offering great opportunities for wide-angle photography. Off the ledge where most of the remains are found the coral reef has many fish, including emperor angelfish, grouper, blue spotted rays and morays. Soft corals give colour to the reef and there are plenty of macro opportunities, including blennies, on and around the 'garage', and nudibranches.

Heading north the next stop was Sha'ab Su'adi, where lies the wreck of the Blue Bell, a large cargo ship that sank in the late seventies. She lies upside down on the reef with the bow in shallow water and the stern at 80m. Carrying an assortment of Toyota vehicles, including pick-up trucks and four door



Nikon F90X, Aquatica housing, 105mm lens. Nikon SB26 and SB28 in Kevin Cullimore Housings. Fuji Velvia. Exposure Mode Aperture Priority (F22).

saloons, these are now scattered all over the reef and are teeming with life, including sweepers and glass fish, and encrusted with coral and soft corals.

Swim down the side of the wreck to about 40m and you can swim beneath it where it lies on a hollow in the reef. This forms a cave with the wreck as the roof and is full of jacks and hanging soft corals.

We moored at a reef called Gurna and were delighted by a shoal of dolphins that joined us and some of us quickly joined them in the water for a swim. Dolphins would often join us as we were travelling and frolic around the bows of the Ishtar and, sometimes, the rib as we were making for a dive.

We did a night dive at Gurna, which, although there is much dead coral, still provided opportunities for some more carefully considered macro photography, including various anemones, hawkfish, feather stars, tiny shrimp, fan worms and clams.

Next stop was Quita el Banna, another reef with a wide variety of fish life, including reef sharks, clown fish resident in their anemones, grouper and striped surgeonfish. Careful inspection of the whip corals identified tiny gobies, which blended well with the red of the coral itself. Soft corals added colour to the reef.

The northern limit of our trip was to an area which offered three top class sites: Angarosh, Abington Reef



Nikon F90X, Aquatica housing, 16mm lens. Nikon SB26 and SB28 in Kevin Cullimore Housings. Fuji Velvia. Exposure Mode Manual

and Mello. We spent 5 days diving these sites and would have been happy to stay longer.

Angarosh is a small island and here we saw shark and manta rays as well as large shoals of barracuda and jacks and a reef teeming with life. Most dives were in currents but using these, you eventually arrive at the lee of the reef, affording an area free of current to complete the dive.

A steel tower identifies Abington Reef. Here we were able to photograph hammerheads as well as shoals of barracuda and sweepers in caves and again enjoy the wealth of photographic opportunity on the reef.

Mello has a rusting hulk on the top of the reef and the dive was excellent with hammerheads and a shoal of humphead parrotfish, clownfish in beautiful red anemones, squirrelfish, red hind, and plenty of macro opportunities, including flat worms that were white, black and gold.

On the journey back to the south we took the opportunity to dive again the sites we dived on the way up. In addition we spent four days diving the north, south and wall of Sanganeb. Hammerheads, reef sharks,

large grouper, jacks, humphead parrotfish, and a rich array of reef fishes and soft corals made these very memorable dives.

We also took the opportunity to visit the lighthouse and keeper at Sanganeb, who welcomed us and allowed us to go to the top of the lighthouse to take panoramic shots of the reef and YS Ishtar.

Our final dive of the trip was again the Umbria and then it was time to prepare for the return journey. As it was an evening flight to Cairo, we again took a trip, this time to the old port south of Port Sudan called Suakin. This took us across an arid landscape, to a dusty, ramshackle village and, through that, to the ruins of this once bustling port before it silted up. One is very aware that this is one of the poorest countries on earth and this is no tourist hotspot. However, it did afford opportunities for some photographs in the ruins and around the village, including camels resting at the waters edge.

The departure from Sudan was fairly uneventful and, thanks to Tico, we avoided paying a surcharge of \$100 for being jointly 'overweight'. Probably a normal attempt to squeeze more dollars out of visitors. This highlighted the importance of ensuring that trips to Sudan are via a company like Diving World, which has the experience and local agents to smooth the path.

We arrived in Cairo where we again had to pay an airport tax of \$15 as the last one only lasted 14 days and this was day 15! However we were in time for a welcome shower, a delightful meal in an open-air restaurant at Novotel and then a night in a large bed with air-conditioning in the room.

The flight back to UK was on what was obviously a recent addition to the Egyptair Airbus fleet, with all mod cons but, sadly, no alcohol. However, that is a small price to pay for what was a diving expedition that I feel included some of the best diving I had ever done. I will be returning to Sudan without a doubt.

www.imagine-photography.co.uk



Len Deeley

Anemonefishes and host anemones

By Mikayo Langhofer

Anemonefishes and host anemones are a favourite subject of the underwater photographer. Fascinating to watch, either in their native habitat or in an aquarium, anemonefish dive into the arms of their host anemone immune to its deadly sting. Anemonefish are evocative of the world underwater, colourful delegates of the ocean. How do they do it? Why do they do it? And why does the sea anemone allow them to live within its deadly embrace? The answers to these questions can be found in deadly boring scientific papers suitable for reading only when suffering from severe insomnia. With some luck you can learn more about anemonefish in this article (without falling asleep!). And as is true with any other wildlife subject, the more you know about the animal on the other end of your camera the better your chances of getting a good photograph.

First, a little information about sea anemones. There are almost 1000 species of sea anemones, distributed world wide from pole to pole. However, not all anemone play host to anemonefish. Only 10 species of anemone host anemonefish, and they are found in regions of the Pacific and Indian Oceans where there is warm, tropical water. So don't bother looking for them in the Caribbean. However you will find them in the Red Sea and Arabian Sea.

Sea anemones vary greatly in appearance. A litany of the variety of their appearance would sound like something out of a Dr Zeus book: there are short anemones, there are tall anemones, there are big anemones, there are small anemones... What they all share is a stalk, which is hollow and houses all of the internal functions. At the top of the stalk is the mouth of the



Nikonos V, 35mm lens with Ocean Optics close up lens, Ikelite substrobe 200, Velvia, F22, 1/90th second

anemone, which is surrounded by tentacles which act to capture food and bring it to the mouth. Tentacle shape, length and number are very important for sea anemone identification. The colour of sea anemones is dependent upon the symbiotic algae that live in the tentacles, consequently colour is not of much use in identifying a particular species. The structure responsible for the sticky quality of the sea anemone tentacle is known as a nematocyst, a harpoon like stinging capsule which may or may not contain toxin. The nematocysts of the sea anemone tentacles are used for defence, capture of prey, and internal nematocysts are used for digestion.

There are 28 species of anemonefish. They are members of the family Pomacentridae, which also includes damselfishes. By definition anemonefish are dependent upon their host sea anemones for survival, and are classified as obligate symbionts. Only in the "artificial" environment of an aquarium can an anemone fish live without the protection of a sea anemone. Experiments done in the

wild have demonstrated that anemonefish cannot live without a host sea anemone. When sea anemones are removed from part of a reef, the anemonefish are rapidly preyed upon. However the inverse is not true. Sea anemones appear to thrive with or without anemonefish. At the present time the benefit to the sea anemone conferred by the anemone fish is unknown.

Other fish may live in a sea anemone, but because they do not absolutely depend on the anemone for their survival they are not classified as anemonefish. For example it is relatively common to find sea anemones which have schools of juvenile black damselfish living in them. Damselfish are not anemonefish because their survival is not dependent upon the sea anemone. None the less, they sometimes share sea anemones with anemonefish and sometimes are the sole inhabitants of sea anemones. Damselfish appear to use the sea anemone as a protected nursery, as they grow larger they leave the sea anemone. Some species of sea anemones are home to small shrimps or crabs. The relationship



of these animals to the sea anemone has not been studied and it is not known if they are dependent upon the sea anemone for survival, or if like the damselfish, it is a case of facultative symbiosis. In non scientific terms, this means that they may live together, but do not have to.

The greatest diversity of anemonefish is to be found in Papua New Guinea. It is an anemonefish paradise, rich territory for the underwater photographer in search of the perfect anemonefish photograph. The number of different species of anemonefish that can be found in any one location decreases as you move further away from Papua New Guinea. Surprisingly, there are no anemonefish in Hawaii.

However there are anemonefish that live as far north as the eastern coast of Japan.

In the anemonefish community there is a definite pecking order based on size. It is theorised that small anemonefish are kept small by the constant harassment of larger fish. And the largest, dominant fish in a sea anemone colony is female, the other fish are males. She is the only female in the colony, it is a matriarchy. The second largest fish in the colony is the alpha female's



mate.

Should something happen to her, the largest male undergoes a sex reversal becoming a female. (Should we really call it reversal-wouldn't change be more appropriate?).

In the sea this matriarchal social structure is somewhat unusual. It is more common for the dominant fish to be male with female harem, and for sex reversal to go from female to male. For example both wrasses and parrot fishes begin life as females and become males later in adulthood.

Anemonefish are not inherently immune to the sting of the sea anemone, but appear to develop a resistance to the nematocysts. In experiments done in aquariums, anemonefish introduced to a new sea anemone will perform a prolonged dance, approaching the sea anemone hesitantly, appearing to get stung, retreating, recovering,

and repeating the process for minutes to hours, depending on the species of sea anemone and anemonefish. If an anemonefish has been separated from its host sea anemone for more than a few days or weeks, the above process must be performed before the anemone fish can once again live comfortably in the tentacles of its host sea anemone. The ability of the anemone fish to live within the tentacles of its host sea anemone appears to be derived from the anemone fish, and is not conferred by the sea anemone.

Mikayo Langhofer

More information about anemonefishes can be found in "Anemonefishes and their host sea anemones" by Daphne G. Fautin and Gerald R. Allen, ISBN 07309 8365X.

Shark Fin Soup

by Mark Webster

Underwater photographers are often prepared to spend small fortunes on travel to exotic overseas locations in search of unique images or exciting encounters. Most will tell you that the biggest adrenaline rush comes from being close to those larger denizens such as sharks, mantas or whales but these encounters often occur in very remote areas or might be unnatural feeding scenarios with crowds of other divers in the audience. If your budget does not stretch to Cocos, Galapagos, Ningaloo, the Azores or even a chumsicle in the Bahamas then you might be tempted to put the idea of meeting the big guys out of your mind. But all is not lost, we do have our own big creature encounters around the UK coastline, although their appearance may be seasonal and brief and conditions often less than ideal. In order to experience this you need to be a little flexible in your trip planning and leave your dive skin at home as you will be sampling the chilly waters of the Atlantic, English Channel or Irish Sea.

I am of course referring to the largest and perhaps most impressive fish in our waters - the basking shark. It is only recently that the basking shark has been recognised as a threatened species in UK waters and now enjoys fully protected status. For many years the sharks were hunted for the high quality oil from their livers and the number of shark sightings dwindled dramatically as a result. In 1998 their protection was announced and, as if in response to this, a huge number of sharks visited the waters of the south western approaches during that summer which prompted banner headlines in the



This is the classic basking shark approach shot and perhaps the most difficult. You need to drop into the water ahead of the shark and keep making adjustments to your position to ensure you intercept. Only put your head under the water at the last moment, particularly if the visibility is bad when a metre off track means a missed shot - Nikon F90X, 20mm, Subal housing, Elitechome EX, f5.6 @ 125th.

national press. Reports varied from 200 to 500 and more sharks on any given day, but whatever the actual number if you were anywhere between Lands End and Plymouth during those three weeks in May and June you could almost guarantee seeing several in a day. Sadly those numbers have yet to be repeated, reputedly due to the El Nino of the winter before, but you

can still confidently expect to see dozens of these beasts if you are in the right place at the right time and the experience of swimming with them is nothing short of magic.

Basking sharks are thought to be migratory, following the rich plankton blooms in temperate waters on which they feed. During the late winter the waters of the south west reach their lowest



The sharks will often veer off at the last moment until they get used to your presence. Be patient because when you get close the experience is awesome - Nikon F90X, 20mm, Elitechome EX, f11 @ 125th.

temperature which often results in the best visibility, but not a lot of fish activity due to the low food levels. As spring approaches the surface water temperature begins to warm slowly until the first period of extended sunshine, maybe only three or four days, which is the catalyst for an explosive growth of zooplankton. This generally occurs in early May and as soon as I hear complaints about the soupy vis in the local dive shop I know that the first sharks will not be far behind. The first sightings are generally in ones and twos and it can help a great deal to have a few reports from the local cove boat fishermen who often see them first whilst hauling their pots.

Although the sharks are seen on both the north and south coasts of the Cornish peninsula there are certain areas around Lands End and the Lizard where they will often congregate. These are broad shallow bays which the tidal flow will initially sweep the thick plankton soup into where it is then held until consumed or dies off. The sharks will often congregate in these bays and feed for several days which offers the opportunity for repeated encounters. At the beginning of these periods the

visibility is often appalling with the waters resembling deep green pea soup or the muddy waters of the Amazon basin. It is possible to shoot in these conditions, and you may well need to if your time is limited, but you need to get very close and use a very wide angle lens as the visibility will often be less than a metre. During May 2001 we enjoyed several days in Porthcurnow bay with more than 20 sharks on flat calm but very green waters.

Having tried various methods of attack I now feel that the best way to be personally equipped is to snorkel wearing a one piece wet suit with as little weight as possible. Scuba can be used if you have a shark feeding repeatedly in a very small area but generally it presents too much drag and you will soon be exhausted from your exertions. Most encounters are brief and require orchestrating by spotting your target shark from the boat and then slipping into the water ahead of it and watching the dorsal and tail fins swim towards you on the surface. You can then snorkel on an intercepting course until the shark bursts from the murk into your viewfinder. When feeding they will ignore you and veer off a metre or

two away and at this point you will need to put on a burst of speed to stay alongside briefly for a few head and tail shots. The plankton will often break up into patches and you can observe individual sharks cruising around the edges as they consume their own personal banquet. This behaviour presents perhaps the best opportunity to position yourself on the edge and wait for the shark to swim by you time and again.

The best photographs will be taken using natural light only - forget your flash as it will only produce monumental backscatter and be too unwieldy to move quickly on the surface. A wide angle lens is essential, either a 20mm or 17-35mm zoom for a housed system or a 15mm for a Nikonos. A fish eye lens can also be useful if the visibility is very poor, but then you must aim to get very close to your quarry. Even when the visibility is very poor horizontally in the water, there will still be plenty of light at the surface and even if you duck dive below a shark you will rarely reach more than a couple of metres depth. So load with 100 ASA or 200 ASA, set your shutter speed to 125th and meter the water below the surface and then perhaps open half a stop on the aperture - the sharks are grey and sometimes quite dark. Auto focus will often hunt on all the particles in the water, so fix your focus at a range that will fill the lens with shark, perhaps 1-1.5m, wait until the shark is sharp as it sweeps towards you, and then don't forget to bracket your exposures in all the excitement! If you have a housed system with motor drive then you have an advantage as you can shoot single frames quickly or set for slow continuous and you should get 4/5 frames per pass.

Cornwall is not the only location for reliable encounters with these impressive beasts. Dense concentrations of plankton also gather around the Isle of Man and attract large numbers of sharks throughout the early summer. The



Every now and then the sharks swallow and look a little more like their more carnivorous cousins. When a shark stops feeding to swallow they seem to become more aware of your presence and are likely to shy away - Nikon F90X, 20mm, Subal housing, Elitechome EX, f5.6 @ 125th.



When the sun shines the surface reflections give the sharks an attractive dappled appearance. Many of the sharks are 3-4m (12-15 ft) long, so shooting a side shot at a range of 1-1.5m with a 20mm will only capture half the fish in the frame - Nikon F90X, 20mm, Subal housing, Elitechome EX, f5.6 @ 125th.

most likely locations are on the west coast close to the port town of Peel. Here the annual visitation of the sharks is well known and is even used as a tourist attraction, with several boats available to go shark watching from the surface during the season. It is also here that the Basking Shark Society was first established and their website is

a good place to start for an update on the arrival of the first sharks of the season.

So dust off that wet suit and don't worry about getting cold as it is easy to raise a sweat even in chilly Atlantic waters when chasing these majestic denizens for the perfect picture.

Mark Webster

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www.isle-of-man.com/interests/shark/society.html

In Cornwall the first sightings of the season will be posted on the website for the Porthkerris Diving Centre on the Lizard where you can also organise a boat to take you shark hunting.

www.porthkerrisdiver@demon.co.uk

For excursions around Lands End contact Bill Bowen at Mounts Bay Diving: 01736 752135.

Mark Webster hosts underwater photography workshops aboard the MY Coral Queen and is the author of 'The Art and Technique of Underwater Photography' published by Fountain Press.

See Mark's website for further details: www.photec.co.uk

The revolutionary Inon Quad strobe

Inons Quad Flash is an innovative new strobe that combines the build quality you expect from top end designers, while benefitting from lower manufacturing costs enabling the Quad to offer an outstanding specification at a surprisingly modest price.

The Quad uses four small flash tubes set at 90 degrees to assure even coverage. Naturally it is TTL compatible with Nikonos and most housed Nikon cameras. But the Quad also boasts important features for adding creativity to your shots including a choice of Full, Half and Quarter power for more subtle lighting than TTL which is often quite harsh. A nice feature is the built in rotating shade that allows you to mask off two of the flash tubes for adding shadows. There's also

a clip on diffuser to

soften the light further or for reducing power by an extra stop - giving Quad users a total of four manual power settings. A built in focusing light lets you see your subject and is automatically turned on when you activate the camera.

The Quad mounts to ports approximately 90mm in diameter including 105mm ports for the Nexus. Ocean Optics have manufactured special ports for Subal and Sea and Sea housings.

The Quad flash is threaded on the front to accept a dedicated wet lens that doubles the magnification of your camera lens. Even this bears the hallmark of Inons attention to detail -

it's actually a doublet meaning it has two elements. The doublet yields higher image quality.

The Quad has a mounting point for use with normal flashgun arms allowing it to be swung in and out of place rather than mounted directly to the port or for use as a conventional strobe. It uses Sea and Sea Nikonos fit TTL cables. Power is from 4 AA batteries.

The Inon Quad Flash is one of the most exciting additions to underwater lighting in a very long time.



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UwP 37

Available darkness

by Pat Morrissey



Scapa Flow is an almost land-locked area of water to be found at the northernmost tip of the British Isles. At the end of the First World War, while negotiations over the terms of armistice were still going on and being fine-tuned, seventy-four ships of the German Imperial Fleet lay at anchor in the Flow. Admiral Ludwig Von Reuter, relying on reports in the four day old newspapers which were his only source of information as to how the negotiations were going, came to believe that the British might well soon want to take his fleet and use them to attack his country's defences; and so there came about what might be regarded as the most magnificently futile of naval gestures, the order to scuttle the whole German fleet where it lay, in order to deny the enemy any use or advantage of it.

I had been to the Orkneys

once before, and attempted in vain to wrest a few decent images from its cold, black waters. The German wrecks which remain on the seabed – most were salvaged for scrap in the decades following the final peace treaty – are habitually swept by strong currents, and are often at depths somewhere between 35 and 45 metres. These are conditions which challenge the underwater photographer, and in preparation for this return trip I was careful to take the TDI Advanced Nitrox course, to go with a group of experienced technical divers, and to try a different tack on the photographic front. It was suggested to me that the best hope lay in simplifying my approach to the problem. Forget trying to use a strobe and recording nothing but backscatter: how much of a battleship could I hope to illuminate, anyway? Far better to concentrate on making the most of

I abandoned my housed Nikon F4 and went back to the Nikonos V and a Sea & Sea 12mm lens. I set it on Aperture priority, and loaded up with black-and-white Agfa Scala slide film which can be pushed (according to the manufacturers) to 1600 ASA.

whatever available light there might be.

I have to admit that it looked pretty damned dark to me as I descended the various shotlines each day, but my mentors had been right: keeping things as simple as possible, I abandoned my housed Nikon F4 and went back to the Nikonos V. I set it on Aperture priority, and loaded up with black-and-white Agfa Scala slide film which can be pushed (according to the manufacturers) to 1600 ASA; this way, I figured, all I would have to do was hang on to any available



*Top left. Flash adds colour and detail but introduces backscatter
Top right. The long shutter speed has blurred the diver and his bubbles.*

Right. Extremes of contrast should be avoided as the camera's exposure system cannot cope.

part of the wreckage to offset the slow shutter speeds, compose the shots and let the camera do its own calculations for me.

At that depth, and in cold and current-prone conditions, this was just about all I would have time to do; and I was delighted when I saw the results. The human figures might be slightly blurred, since they had the annoying habit of moving and breathing instead of merely freezing, but the extended exposure allowed far more of the overall scene to come through on the final images than I'd ever seen before. It was the scale of the wrecks to the divers that was most striking, along with the flared beams that issued from torches like light sabres.



The whole scene became eerily atmospheric, and oddly reminiscent of the opening scenes of the sci-fi film *Alien* – tiny human figures floating down towards armoured metal plate twisted and crumpled like paper, mere insects pitting themselves against vast, looming structures.

I'll be back again next year.

Pat Morrissey

Modelling for the camera

by Mark Webster

Taking pictures of divers should be simple. There are always plenty around and they should be able to respond to instructions, unlike fish who seem determined to turn their backs on you. However, the reality is that whilst getting a picture of a diver may not be difficult, getting one which is acceptably composed and conveys the message you want is not so simple. Good diver photographs sell diving and to obtain good results you need a degree of planning and the co-operation of a patient model.

The 'model' need not necessarily be the classic female clad in matching kit and accessories, but the subject must be dedicated to your needs, understand your requirements and not be distracted by their own dive plan or interests. By following a few simple guidelines you can produce some stunning diver pictures instead of those which appear to have been snatched of passing diver.

Whatever your camera system you have a wide angle lens is essential to take good diver photographs. As a minimum a 20mm lens is required, as more often than not you are trying to illustrate the diver exploring the underwater world or perhaps performing some task. For this you need to get both the diver and the surroundings in the picture and remain as close as possible to your subject - so 20mm, 18mm and my favourite, the full frame fish eye are the best tools. You will normally be using fill flash at least and so a wide angle flash gun is the best choice. This will allow you to light most of the picture area if necessary, but narrower beamed strobes can be used to good effect for balanced light photographs, or consider two narrow beamed strobes (both connected or one on slave) to increase the lighting area.



Diver and table coral silhouette – Silhouettes are very effective and striking images. Try to include the sun and perhaps have the diver carry a torch. A good option if the viz is poor. Nikon F90X, 16mm fish eye, Subal housing, F8 @ 125th 100ASA.



Diver half and half – you don't always have to go under the water for your diver pictures. Try to think of different ways of introducing that sense of exploration underwater. Nikon F90X, 16mm fish eye, Subal housing, F8 @ 125th, 100ASA.

Effective communication with your model is essential for success. No matter how comprehensive your surface briefing, you may change your mind when you view the image through the viewfinder, conditions may be variable or an unexpected event means you must be able to direct your model. So

establish a few simple hand signals for basic body positions and postures, for example:- facing head on, vertical, side on (left/right), body angle, arms in/out, direction of gaze, breath held/breathe out, swim through picture, go up/down etc. Also, be prepared to show your model exactly the pose you require



Another example of combining marine life with your model. In this instance the model is the background interest and the image implies discovery of the lobster. Nikon F90X, 16mm fish eye, Subal housing, F8 @ 60th, YS120 flash. 100ASA.

in the position you require if communications break down.

Having the diver in the right place within the picture is also essential. As a general rule, try to ensure that the model is not swimming out of the frame, as this inevitably looks like a snatched shot. Look carefully at the location of the diver in the frame and try to balance the body position and shape with the other subject matter in the image. For example, the classic diver on a reef wall can be taken head on with the reef running vertically or diagonally through the frame, or you can look for a balance in a diagonal composition by positioning the diver to follow or mimic the angle of the reef. Try to balance the background space behind the diver with blue water or perhaps a sunburst. Other options include framing the diver in the entrance to a cave, between natural reef features or with marine growth or using shape of a wreck. Although you may have planned your shots don't forget to move about looking for alternative "negative space" which will compliment or support the model. Another important point to remember is that when your model's face



The rules of composition apply equally in diver photography. It often helps to try and get your model to follow the line of the main subject. Nikon F90X, 16mm



Divers doing something make interesting pictures, in this case using a camera, but you must make sure that the pose looks natural. Nikon F90X, 16mm fish eye, Subal housing,

dominates the frame, or can be clearly seen, ensure that the eyes are directed at an obvious subject - never at the camera. Use your signals to show the model where to look in the frame and also ensure that the position of arms and legs look natural. Try to avoid forced perspective when using wide angle lenses - for instance if a hand is too close to the lens then it can look massive



Nudibranch and diver – Including a diver in a double exposure is often difficult but can produce striking results. This type of shot requires practice especially to get the direction of gaze correct. Nikon F801, 60mm macro



Diver with jewel anemones – when working close to your model remember to direct his/her gaze towards the subject. Practice your signals to get this right. Nikon F90X, 16mm fish eye, Subal housing, F8 @ 60th, YS120 flash. 100ASA.

in comparison to the rest of the body - examine the image carefully through the viewfinder before releasing the shutter.

There is no doubt that the cliched shot of a female diver in colour co-ordinated kit does look attractive and has a universal appeal especially to publishers, manufacturers and training organisations. Despite this, excellent and appealing pictures can of course be taken of your average diver, and often will look far more realistic as

a result. However, an attempt should be made to make your model look tidy and wherever possible bright co-ordinating colours will add to the image, rather than plain black. Tuck hoses, gauges and straps away neatly and make sure there are no items of equipment that will float above the model. The choice of mask is also important and the classic oval full face plate mask is possibly most flattering, for a female model. Perhaps the easiest style of diver shot to set up features

the diver in silhouette which removes the worry of colour co-ordination or eye contact. The classic close focus wide angle shot is the best example of this where the foreground features a brightly coloured subject and the diver is seen in silhouette, perhaps against a sunburst, in the background. The exposure for these type of shots can be quite tricky as the foreground flash illumination must be balanced with the background natural light exposure to produce a good silhouette and it is often best to use manual flash exposure rather than rely on TTL.

If the location lacks a central point of interest, then consider adding a prop or tool to enhance the image. Adding a torch, camera, slave flash, lifting bag etc. can create a focal point of action round which you can build the image. A torch, for instance, says to the viewer that the diver may be looking for something as he/she swims through the image or could be peering into a hole seeking marine life. The ultimate prop of course can be interaction between the model and marine life and you should always be prepared for the unexpected – another good reason to perfect your signals.

Working often with another photographer or a regular buddy who has an interest in the final result will be more successful than relying on someone you have just met on the boat. The roll of photographer's model requires endless patience which we must bear in mind when directing operations, otherwise the signals may not all be polite!

Mark Webster

Author of 'The Art and Technique of Underwater Photography'

Hosts regular workshops both overseas and in the UK. For further details visit Mark's website

www.photec.co.uk

or see further details at

www.oonasdivers.com

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Fear of Failure

By Martin Edge



We all have a tendency to resist to change! I know I do. To accept change for ourselves is to concede that our previous held beliefs and ways of doing things were wrong. In underwater photography resistance to change encourages us to proceed along a familiar road and the more we travel that same road the more comfortable we become with it. In our everyday lives we embrace routine and are often reluctant to challenge our routine and the comfortable, secure lifestyle that many of us lead.

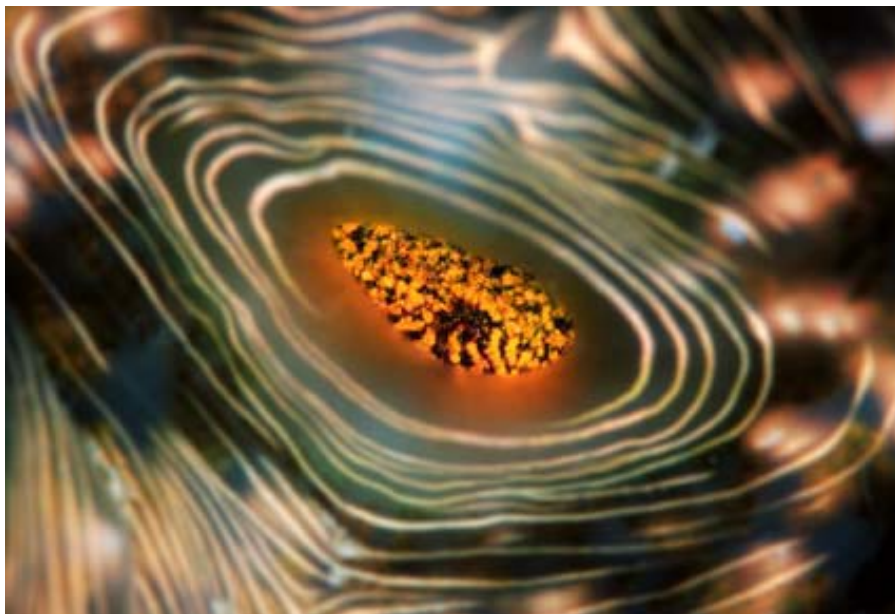
We resist and fight the slightest notion of failure and this fear of failure impacts on our underwater photography. We see and photograph underwater subjects already approved as photogenic in diving magazines and books.

In the past I was guilty of repeating a photographic success again and again. I would go and repeat images and ideas I had achieved on previous photo trips. Not in order to practice my skills or develop my potential but simply to avoid the chance of a failed attempt at a brand new idea. I found myself repeating the same technique on the same subject using the same composition and the same lighting angle. The only difference was the location, which could have been thousands of miles away from the

A couple of days before I shot this picture I had visited the cinema to see the movie 'Perfect Storm' starring George Clooney. The animated wave action from the movie really inspired me. I began to look towards the under surface of the sea for interesting patterns, shape, and movement as waves broke against the harbour wall in Bonaire. I liked the colours and texture of this particular shot. I scanned it into Photoshop V and stretched it into a panoramic format using Edit – Transform – Scale. I prefer it to be viewed upside down, which is the way it is printed on this page. Nikon 16mm fisheye and natural light. F11 or 16 @ 125th or 250th second. Elite Chrome 100



Everyone is trying slow shutter speeds and rear curtain sync these days, which is good! When I took this it wasn't so new. I was inspired by a book called 'Rhythms from the Wild' by natural history photographer Art Wolf. I recommend this book to all underwater photographers. Nikon 20mm lens, half second @ F8. Sea & Sea 120ys flash on TTL. Elite Chrome 100



What is the first rule of composition? Answer! To place the centre of interest off centre on the thirds intersection. I make a habit of breaking a rule of composition at least once a day! It's another method of 'seeing' an image in a different way. I shot this clam with the swirls in several positions within the frame. In my opinion the middle of the frame worked well. Nikon F90x Subal housing with a 105mm macro lens and ring flash. (Only way to light inside a clam). Mabul, Malaysia



Beneath Bonaire's Town Pier at night you can easily find these corals as long as 3–4 inches. They stand out supreme and I know of no other place in the world where they are so intact and easily photographed. This was a last minute idea using the top off a black bleach bottle as a snoot to give me a beam of flashlight no wider than a 50 pence piece. I lit the background with a second flash on manual power at a distance from the corals to underexpose it. Nikon F90x Subal housing with a 105mm macro lens.

previous. I gave myself a 'pat-on-the-back' and silent encouragement for achieving an almost identical picture for the second time around.

I could not purge myself of this attitude, particularly with my wide-angle work no matter how hard I tried. I would get into the water with camera in hand determined to break all the rules but my mind would go blank which triggered a peculiar kind of anxiety deep inside me. I was losing my confidence and doubting my ability. I became very creative at making excuses to my self to take the same old stuff and stick to what I knew and forget my desire to obtain some creative images until another day!

I looked at my behaviour and with the help of a colleague, began to understand that I was not developing my full potential as an underwater photographer because of the 'Fear of Failure'. I was working in an uw photographic rut or comfort zone! I had this misguided belief that I had to produce a competent roll of 36 pictures with some 'keepers' in order to satisfy everyone. I had the notion that I had to produce results that my peers and my students would accept as successful.

Our entire culture disapproves and looks down on failure. Most of all, none of us want to be thought of as a failure. So we repeat our successful shots time over and over. Rather than experiment with ideas and exposure we tend to opt for an easy way that will be acceptable to others.

Does the fear of failure enter into your underwater photography?

Do you find yourself repeating the same successful shot on other photo-trips?

If the answer is yes, there is a solution!

Free Your Mind and dare to photograph underwater in a way that others may consider to be bizarre.

Take pride in your failures; show your failures to others. They will not reject your efforts but will admire



Those who have visited Capt Don's Habitat on Bonaire may recognise the tree, which is situated alongside dive manager, Jack Chalk's office. I shot this picture whilst wallowing about in a couple of feet of water beneath the wall. The camera was fully submerged and the circle of vision is 'snells widow' Jack saw the picture and to his knowledge the tree has never featured in an underwater photograph that he has seen! I found that hard to believe. To me it was an irresistible subject. The shot is printed upside down. Flip it to see how it looked in the viewfinder. 16mm fisheye, natural light. Elite Chrome 100



I have written numerous articles on the subject of working close to the 'under-surface'. It was this picture and idea, which inspired the 'surface' theme for me. It began one calm afternoon in Sipadan when I was messing about experimenting, shooting through the under-surface of the water. I was working just off the beach at a depth of no more than a metre. I spotted two clouds side by side and began to shoot them with my Nikon F90x in a Subal housing and a 16mm Fisheye lens in natural light. The glass calm surface complemented by first, the reef reflection, secondly, the deep blue of the horizon and thirdly, the shingled sea bed, illuminated by the rays of the afternoon light seem to draw the eye of the viewer towards the patterns in the sky. This idea works with a multitude of subjects, which are earth bound.

your passion, creativity and willingness to experiment and shake loose of familiarity. Failure means you are developing, learning, visualising and imagining.

Experimentation without fear of failure indicates that you are thinking and seeking to perform at that mystical stage where co-

ordination between hand and eye meets and compliments heart and soul.

So what if..... a shot does not work or someone thinks your idea's are crazy. What do you suffer? The loss of a frame of film, nothing more!

Remember, its okay to feel

apprehensive when you experiment. However, It is not okay to remain apprehensive, or allow your apprehension to stop you from developing your skills as a photographer!

Martin Edge

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Reef hooks

by

**Will and Demelza
Postlethwaite**

Our first encounter with 'real' sharks beyond the usual white tip reef variety was in Papua New Guinea. It is a wild and untamed country both above and below the water and as the six of us dropped to the reef below the fin down was pretty hard as the current was running.

The huge array of sea fans and Dendronephthia bent and swayed in the wind. As we neared 30m shadows of ten to fifteen big sharks danced in the blue, 20m in front of us. A large Grey Reef came over to check us out and two Silkies glided closer. Finning hard to remain stationary I tried to set up to take a few shots with my adrenalin pumping but, with twin strobes stuck out on long arms, the drag was too much for my tiring legs. Sadly, Demelza and I agreed to let the current take us but as we turned to signal to the other four in the group we saw them hovering over the reef like a flock of birds. They all seemed to be tied on to the coral. Intrigued but rather horrified we waved goodbye and enjoyed a pleasant drift dive.

The 'reef hooks' that the divers were using were invented by a Japanese diver and they are a piece of dive kit that is now ever present in our BCD pockets. Similar to our initial view of them their use still provokes discussion but we think that, when used properly and sensitively, they have great benefits and also afford extra safety.

Currents are the life blood of the sea and where they run strongly is often where there is the most abundant life. Reef hooks have allowed us to take advantage of this unlike in Papua New Guinea where without them we only managed a



A reef hook is a large shark hook with the barb filed off attached by a length of strong nylon line to any standard gate clip.

Once securely hooked the line takes the strain in the current and, with the addition of some air to the BCD, the diver is held up off the reef below.

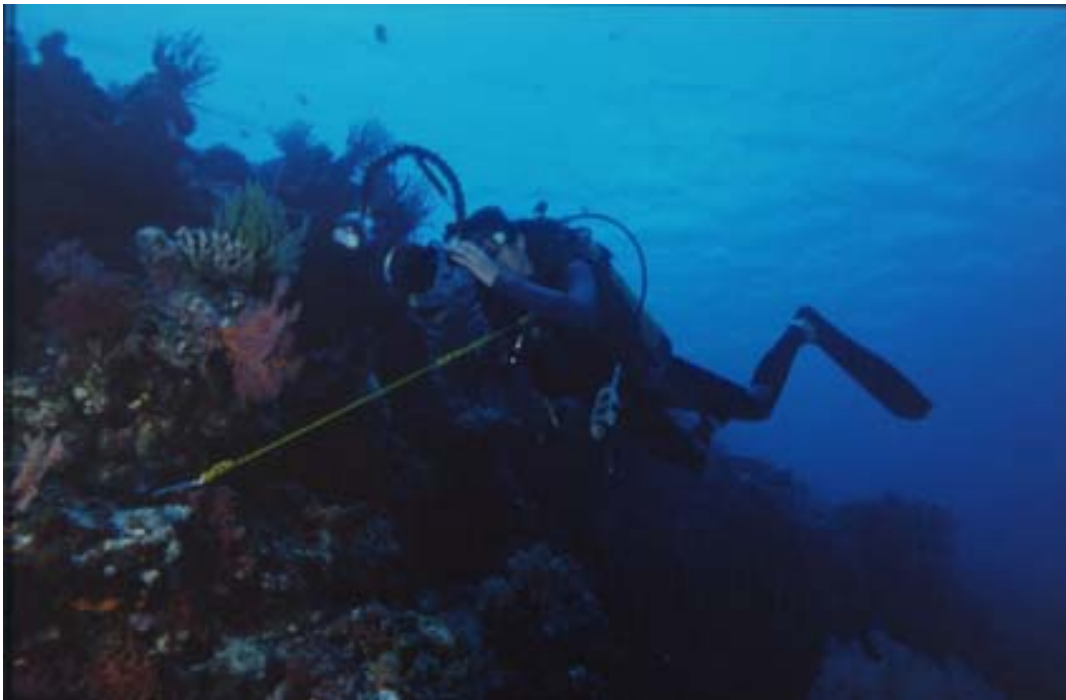


fleeting glimpse.

Reefs come alive when the current starts to flow as food is swept in. Polyps on corals that are normally retracted appear, small fish rise up from the reef to feed in the water column and the big stuff comes in either to feed or just rest. All this produces opportunities for shots not otherwise available and I know from experience how trying on both air and patience even a small current can be when attempting to compose a shot. By hooking in we have even been able to get great macro shots on strong drift dives.

A very simple device, it is a

large shark hook with the barb filed off attached by a length of strong nylon line to any standard gate clip or such like. Used correctly it is straight forward but there are a few things to be aware of. The clip needs to be attached to the BCD on a D-ring as near to the centre of the chest as possible. This D-ring should be steel for strength. On an area of reef that is fairly flat or protrudes from the wall the hook is attached to an area of rock or dead coral. This can be tricky as dead coral is brittle and can be weak. Once securely hooked the line takes the strain in the current and, with the addition of some air to the



With both hands free and the strain of finning removed, concentration can be put into getting the shots.

A little air in your BCD will lift you off the reef.

BCD, the diver is held up off the reef below. It feels like flying!

With both hands free and the strain of finning removed, concentration can be put into getting the shots. Although the positioning might seem somewhat static for good composition there is quite a lot of 'gliding' latitude available with 3m of line remembering though that the adage 'get close' still applies. If the positioning on the reef turns out not to be correct the hook can be removed and another spot found, remembering to release the extra buoyancy in the BCD first.

The dive site where the reef hook is used more than anywhere else in the world is Blue Corner in Palau, Micronesia. So much so in fact that you actually do a PADI 'Blue Corner' specialty which teaches the use of the hook. This is a truly outstanding dive and illustrates quite a few points with this type of diving.

As the name implies the site is a plateau of reef that sticks out from a corner of the reef at about 25m. As the tide runs in and out, the water is forced over this plateau. When it is running, large numbers of sharks come in for a rest gliding up and down the reef edge on the strong up current.

Divers swim down and hook in on the edge, relax and take in the show from touching distance. Not everyone however has a hook and we witnessed a party of 8 divers all lying flat across the reef holding on with their gloved hands. As you can imagine the rock along the top of the reef is pretty bare of life. If you have reef hook in your pocket it is going to do less damage than holding on and you are raised above the reef.

What goes up must come down and once unhooked the danger of the down current on the other side of Blue Corner needs to be avoided. Up and down currents are not uncommon on many reefs as we have discovered when using our hooks in both the Red Sea and Indonesia and there are stories of divers struggling in strong ones. A reef hook could well help immeasurably if trapped in such a situation.

Some currents get very strong and if your reg starts to free flow with the pressure on the purge button or your mask shifts as you glance at your buddy then it is probably time to go. Like all diving, you get your best shots when you



are relaxed and in control. So give reef hooks a try - they are fun even without a camera but remember, if you do take your camera, attach it securely to your BCD!

Will and Demelza Postlethwaite

Will & Demelza teach underwater photography at Cornish Diving

<http://www.cornishdiving.co.uk>

Buying a secondhand Nikonos 111

by Peter Rowlands

The Nikonos 111 was manufactured from 1973 until 1980 and was the last totally mechanical amphibious camera built by Nikon. As such it has remained a firm favourite with those who still like the reassurance of mechanical reliability.

New Nikonos 111's are obviously no longer available so, if you want one, you will have to buy secondhand and this is where you need to know what to look for when choosing one.

The external appearance is usually a good indication of how hard a Nikonos 111 has been used but, because the camera is robustly constructed, it doesn't necessarily mean that the internal workings should be suspect.

One area of the outer body to check is the silver chromed ring into which the lens fits. This is retained by three small Philips screws and there is a small O ring between it and the main casing of the outer body. If this O ring has not been regularly maintained there could be a build up of corrosion which eventually bridges the O ring. Check that there are no signs of corrosion in this area. If there is, it is not the end of the road as it is quite simple to remove to clean the O ring and groove.

Remove the flash port blanking plug and check the condition of the threads. There shouldn't be any corrosion in this area and the three contact pins should be straight and clean.

Having removed the lens, lift out the inner body with the levers at either side of the outer body. You can now check the area where there may be a terminal problem.

If, in the past, someone had tried to remove the inner body with the lens still in place and if they had used a lot of force trying to do so, they may have "cracked the top



The external appearance is usually a good indication of how hard a Nikonos 111 has been used. This one had been lost underwater for a year and then found again! The lens front port is clean because there was a close up lens attached.

Despite such a long immersion, the camera was still fully functioning and totally dry internally. It eventually went on to be featured in an advert for Nikon in the original Underwater Photography magazine.



If the O ring between the chrome lens mount ring and the outer body has not been regularly maintained there could be a build up of corrosion which eventually bridges the O ring.

body". Evidence of this can only be seen by taking the main O ring out of its groove and checking it just behind the frame counter window. If a Nikonos 111 has this problem there will be a vertical hairline crack across the O ring groove.

If such a camera were to be used underwater, this crack would



Fire the shutter and watch how smoothly the wind on lever moves out. If it is at all sluggish the chances are the camera needs a service.

cause a small amount of water past and onto the frame counter/wind on assembly. Parts are no longer available to repair this fault and the only way to make an attempt at repair is to remove the top body, gently open up the crack and fill it with warm araldite. This will probably cure the problem but there



Look out for a hairline crack in this area which has usually been caused by trying to remove the inner body with the lens still in place



Remove the flash port blanking plug and check the condition of the threads. There shouldn't be any corrosion in this area and the three contact pins should be straight and clean.



Turn the shutter speed dial to 'R' and the film sprockets should rotate freely in either direction. set it to any other setting and they should click into place and only rotate when the film is wound on.



Check that the inner silver rewind fork rotates freely when the rewind lever is down and that it engages when the lever is lifted and rotates with the rewind lever.

would be no guarantee so any camera with such a fault should be avoided.

If the camera you are inspecting does not have a hairline crack you can now make further checks as to the camera's condition.

Fire the shutter and watch how smoothly the wind on lever moves out. If it is at all sluggish the chances are the camera needs a service. Even if it isn't sluggish I would suggest having any secondhand camera serviced before use just in case there are any hidden internal problems. You can build the cost of a service into the offer you

make for the camera.

Turn the shutter speed dial to 'R' and the film sprockets should rotate freely in either direction. set it to any other setting and they should click into place and only rotate when the film is wound on.

Check that the inner silver rewind fork rotates freely when the rewind lever is down and that it engages when the lever is lifted and rotates with the rewind lever.

These are the obvious areas to check and if your camera passes all these tests then you shouldn't be taking a risk but many buyers arrange with the seller to have the

camera serviced first on a 50:50 basis so that if there are any major internal problems you will know before it's too late.

The Nikonos 111 provides a mechanical reliability which is still much appreciated today and a good condition secondhand one will give many years of service either as a main camera or as a trusted back up.

Peter Rowlands

Nikonos repairer for
Ocean Optics, London

peter@uwpmag.co.uk

Warren's word

The Less Money Bite Back

In the Cape of Storms, South Africa, most dive operators choose Yamaha outboards. On a day when the seas were hinting that they might live up to the name, our boat was asked to escort another vessel back to port.

Unusually it didn't sport Yamahas - and it had engine trouble. Michael, our Cox, nodded towards the boat. "Less money motors", he stated dismissively. "You pay less money for them and then you have less money forever more while you try to keep them up and running".

Would be underwater photographers often fall into the same trap. I did myself. As a kid I went through a succession of underwater cameras. I started with a Nemrod Siluro. The flashgun never worked underwater and while I could afford film, my pocket money would never stretch to processing. Next I had a Kodak pocket camera in a Scubisnap housing. It was secondhand and when my father wound it on the film advance lever fell apart. On the one trip I did with it I could take only one shot per dive.

It was like having everlasting film. Next I upgraded to an Agfamatic 4000 camera in a Guppy. I got great pool shots for my college project. But the housing lacked clips and as I rolled backwards off the boat the housing parted in the middle and I had my first soggy camera. Then there was the Praktica BCX in a EWA Marine housing. At 12 metres the operating glove bonded to my hand like a superglued phropholactic. Focusing using the special toothed ring was similar to pushing a ferris wheel round by hand.

For all of my many systems and cumulative expense, my sum

total of underwater pictures probably numbered fewer than fifty shots. I'm particularly proud of one picture which almost shows my diving partner. Those who knew his Cressi Pinocchio mask could often guess his identity after gentle hinting from this single darkly green image.

Now of course I own Ocean Optics and with that comes access to unbounded technology. And guess what? Now I have in focus properly exposed pictures. Of course, all of this comes at a cost. In my case I bought a business. Most underwater photographers don't go that far. But the successful ones may well have several thousand pounds tied up in camera equipment. Why so much? Because that is simply what it costs to get good underwater images.

At Optics we regularly run into the "Less Money" aftermath. There was the Dive Show classic. A guy got an F90 housing system. Unfortunately it was a model that had been found wanting and had been rapidly replaced. The dealer was probably ecstatic to stick someone else with the housing he himself had previously been stuck with. Even happier to ditch the miniature macro strobe. We found out about this when the happy owner called us for a flash cable. We had to tell him we didn't carry that housing brand, and why, and that he'd got an old under specified model.

Then we had to tell him that his macro strobe was not going to do much for his 20mm wideangle lens. All information we could have freely given him before he'd made his purchase.

Then there was the gentleman with the secondhand Subal housing bought from one of our competitors.

Armed with their advice, he had acquired a very nice (and expensive) Nikon autofocus zoom. Eventually, in desperation, he called Optics. Why, he demanded to know, would his zoom not couple properly to his housing? Because, we explained, no housing permits use of pull/push zoom lenses. Only rotary action models.

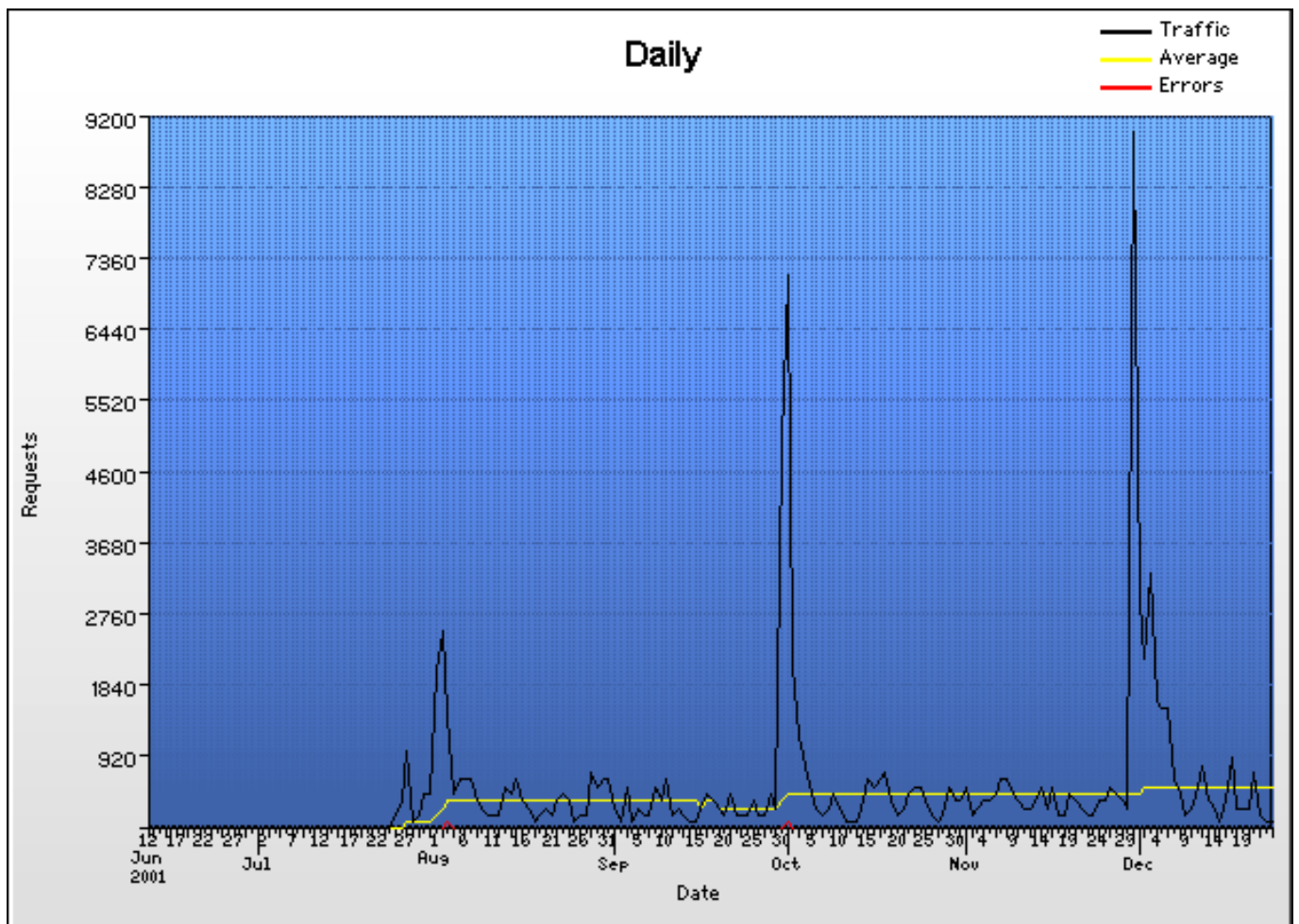
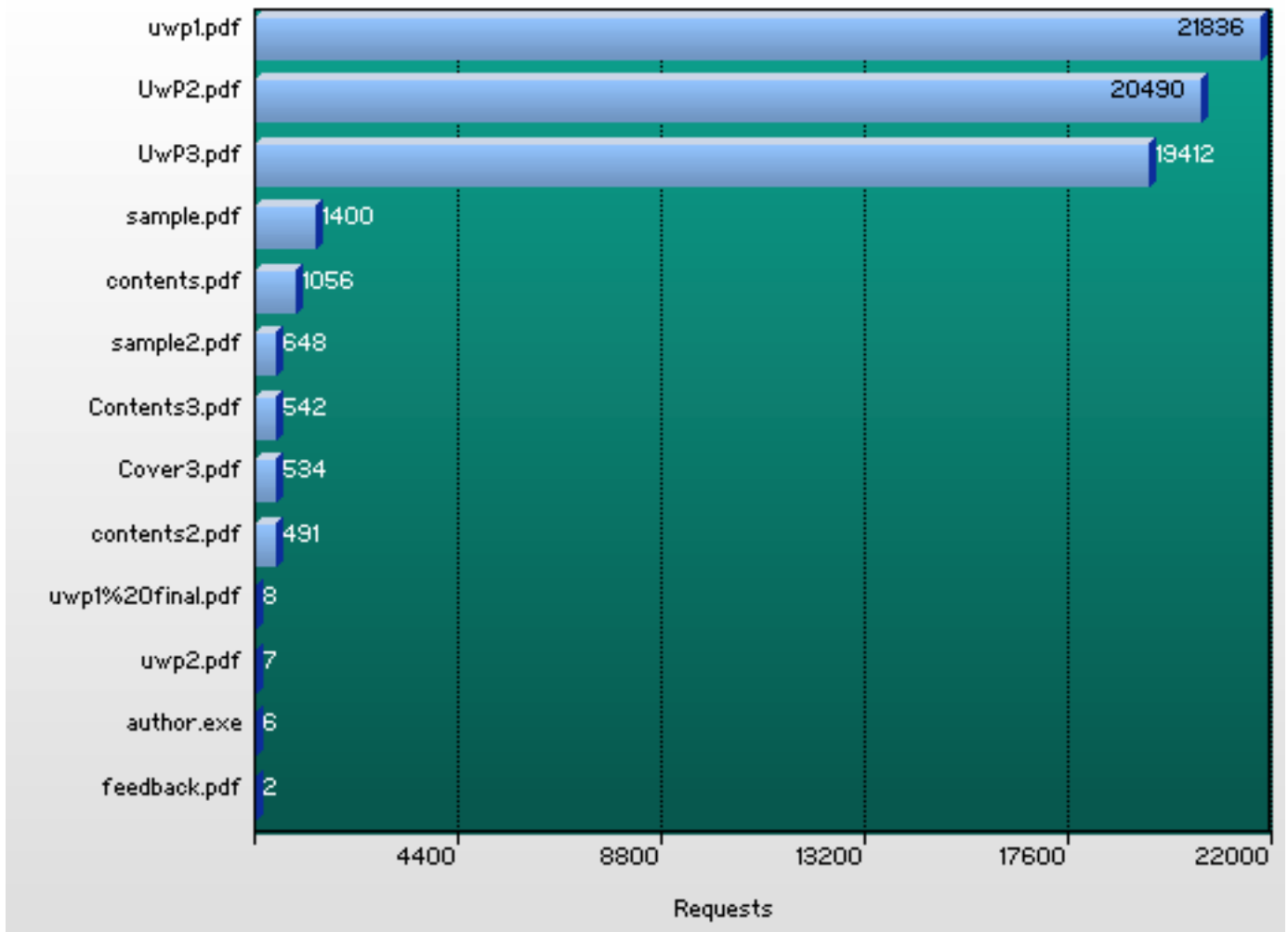
The stories continue unabated. Time and again we are confronted by people who got great deals elsewhere but have this minor problem.... The moral is pretty clear.

Don't equate a great price with a great deal. The best deal puts you in the water with equipment that works.

Steve Warren



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