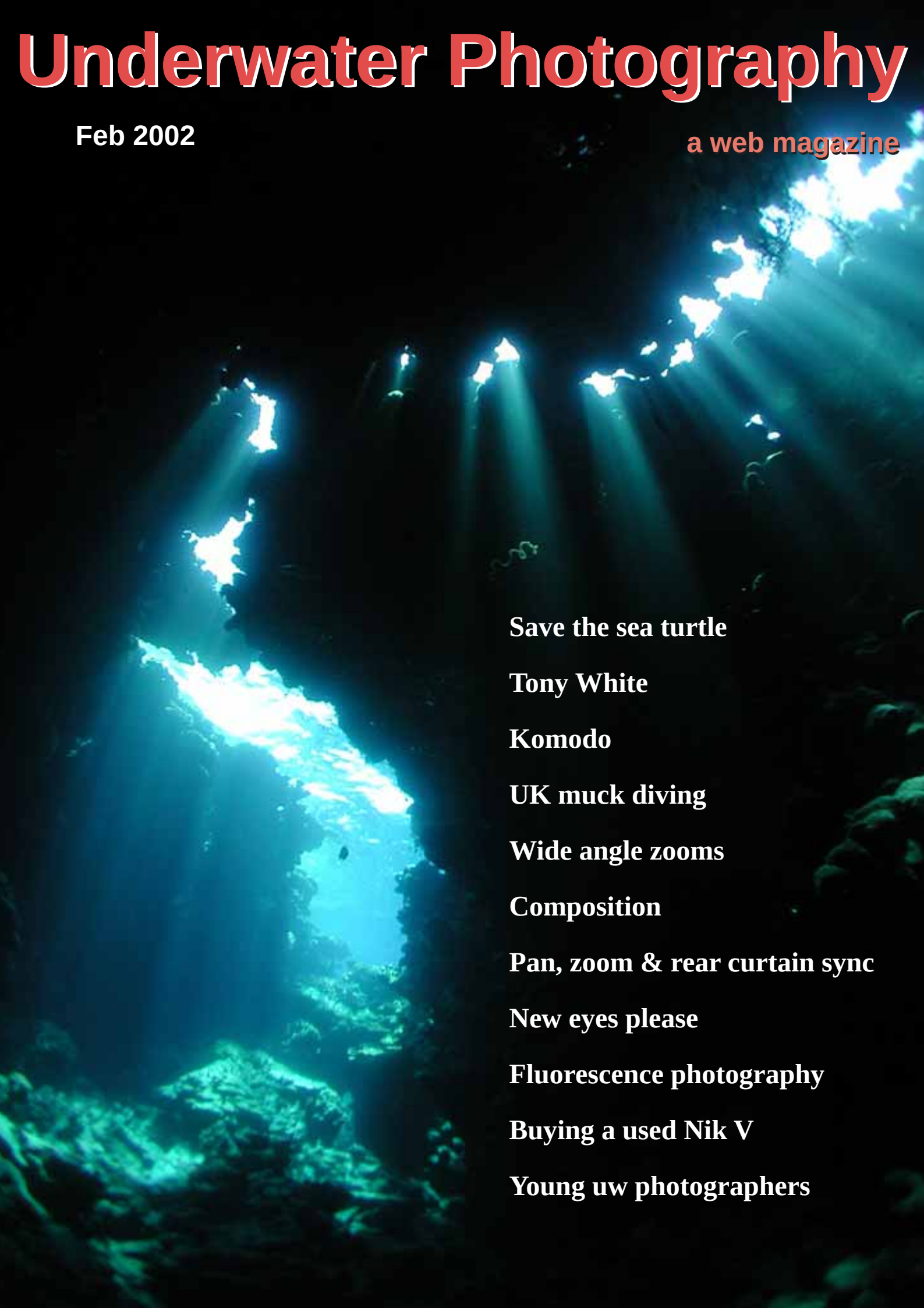
# Underwater Photography

Feb 2002

a web magazine



# GOLDEN DOLPHIN
# VIDEO CD MAGAZINE
## *of diving and underwater photography*

## NOW INCLUDES HI-RES VERSION OF UNDERWATER PHOTOGRAPHY MAGAZINE

**GOLDEN DOLPHIN Video CD Magazine** is a dive publication like no other. It does things print can't touch and makes conventional CD-ROMs look primitive. The key is recent advances in video compression that make possible high resolution full screen video from CD. Each issue contains up to 30 minutes of DVD quality video plus a rich mix of text/image stories and multimedia slide shows in high definition video format that are simply dazzling.

Nothing else can match it for presenting the beauty and adventure of diving. Even the pros are raving about it. Like diving itself, it's one of those things you really have to experience to appreciate.

Check out a single issue for only £6 including air postage to anywhere in the world or subscribe for only £26.50 per year (6 issues). Nothing else in diving can equal it in quality or value for money.

**Covers the World**
Golden Dolphin covers the world of diving, from great white sharks in South Africa (without a cage), to the caves of Yucatan, to the fiords of Norway. From the coast of England to the Great Lakes in the heart of North America, to remotest Ontong Java. From the latest advances in decompression physiology to exploring the abyss with Remotely Operated Vehicles.

The first five issues have included features from South Africa, Burma, the Solomon Islands. UK, Coral Sea, Gulf of Mexico, Western Australia, New Zealand, Palau, Papua New Guinea, Bahamas, Mexico, Belize, Bonaire, Norway, Brazil, Maldive Islands, Philippines, Bali, Sulawesi, West Irian, Red Sea, Tasmania, Madeira, Truk, and Ontong Java.

Golden Dolphin features the work of some of the world's leading professionals as well as enthusiastic newcomers neither of whom you are likely to find in any other dive publication.

and...from micro..to..**mega**

## What the Pros are saying about GOLDEN DOLPHIN

*"...watched the slide show last night. You did a fantastic job. We were amazed how well this all came together. The images and music are really impressive. "* **-Dr. Gerald R. Allen, Conservation International**

*"I just received and viewed the 2nd Issue of Golden Dolphin and I am quite frankly speechless. I have never been able to enjoy sitting at my computer reading and enjoying stories and photographs of such impressive quality.* **-Don Townsend, USA**

*The best thing that's happened in dive publishing. At last, an international showcase for underwater photography which does justice to the subject matter."* **-Roger Steene, Australia**

*"I have received your CD last week and it is astonishing. The video runs very well in my computer even at full screen."* **-Marcelo Krause, Brazil**

*"I have just received the first copy of Golden Dolphin - it looks great! I am amazed at the video quality...."* **-Mark Webster, UK**

*The part I liked best was the video : hopefully more people will realize it is an absolute bargain to get quality u/w footage at this price."* **-Edward Snijders, Netherlands**


**Subscribe to Golden Dolphin at www.goldendolphin.com**

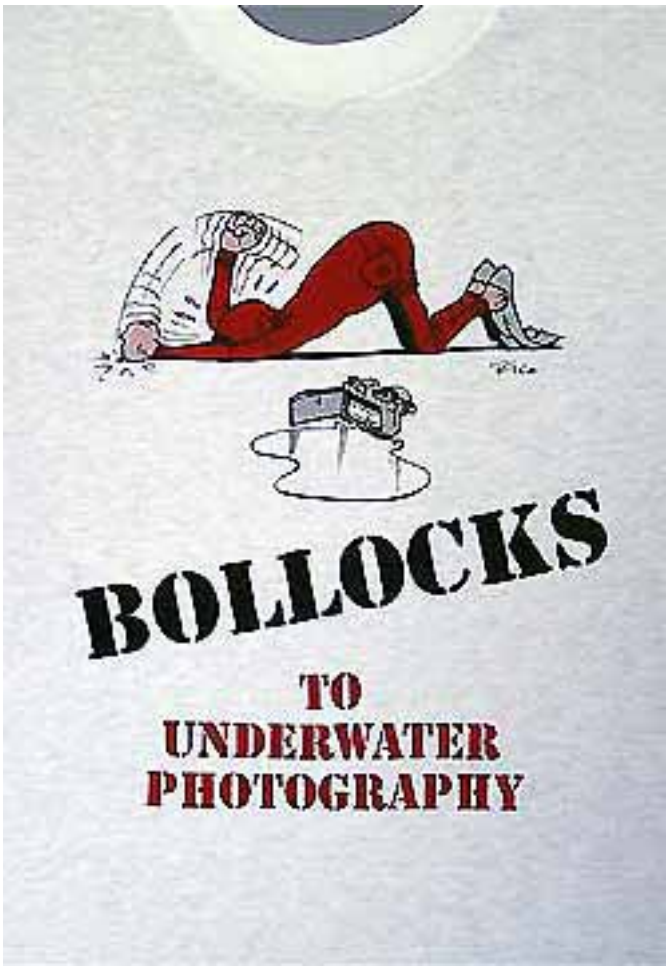
# Underwater Photography

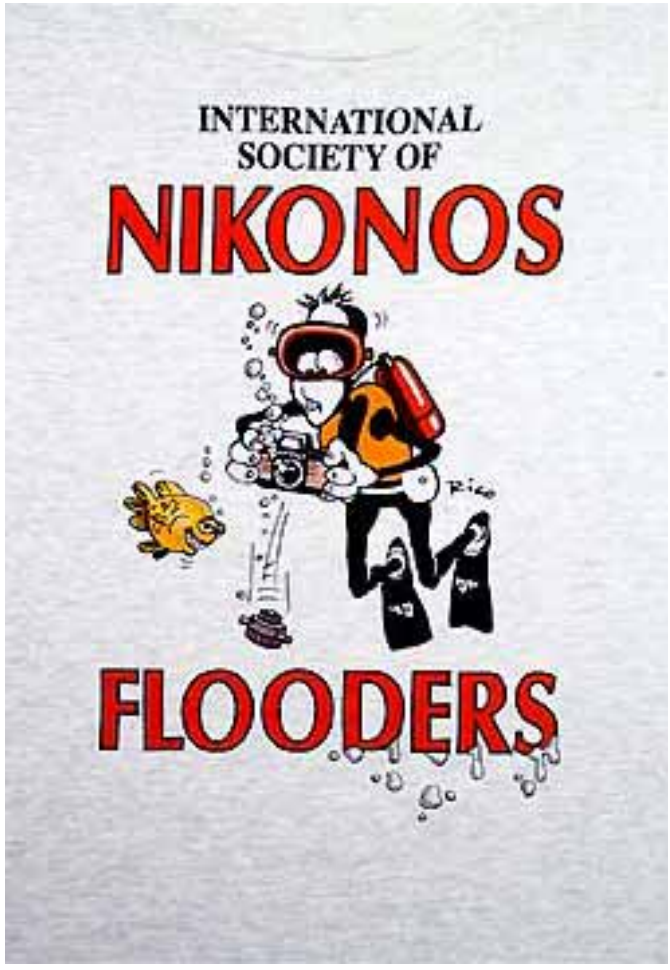
a web magazine
Feb 2002
e mail uwp@uwpmag.co.uk

## Contents

# Welcome to Ocean Images

## Superb quality T-shirts and leisurewear for discerning divers and underwater photographers




Ocean Images, suppliers of T-shirts and leisurwear to the diving market since 1988. We currently offer a choice of over 150 designs sourced from around the world and it is our aim wherever possible to carry stock of all designs to ensure orders are dispatched without delay.

Have fun and enjoy the site!
Order on line!
http://www.oimages.co.uk

# News & events

## Don't miss ADEX 2002

Asia Dive Expo (ADEX) 2002, Asia's only international dive exhibition and conference will be held at Singapore International Convention & Exhibition Centre (SICEC), Singapore during 18- 21 April 2002. The show will be co-located with boat & METS ASIA, the international boating water sports and marine equipment show so that it will greatly benefit for the exhibiting companies in terms of various events and promotions. Specially endorsed by DEMA, ADEX 2002 also receive strong support from 12 major dive publications.

Apart from the dive exhibition, ADEX 2002 also features important forums, such as PADI Member Forum, NAUI Worldwide Update for NAUI Instructor and seminars by worldwide dive operators. ADEX Photo Gallery is also set to be inside the exhibition hall for those who love underwater photography and other interested visitors.

ADEX 2002 will be opened for both trade and public visitors. Trade visitors can pre-register via our official website: www.bkkrai.com/adex for their complimentary entry and exhibitor catalogue. Public visitor ticket cost S$5 for adult and S$3 for child/ student under 16 years old. Visitors to the show might get lucky from our lucky draw as well.

For more information on how to participate at ADEX 2002, please contact Ms. Michelle Tay at tel: +65 332 9629, fax: +65 332 9655/ 3374633 (michelletay@mda.com.sg ) or Ms. Pannida, at RAI Exhibitions (Thailand) Co., Ltd., tel: +66(2) 960-0141 ext 114, fax: +66(2) 960-0140 or email to pannida@bkkrai.com.

## 'Celebrate the Sea' at ADEX 2002

Asian Geographic Magazine, Scuba Diver Australasia magazine & OceanNEnvironment proudly present 'Celebrate the Sea' staged in conjunction with ADEX 18 - 21 April, 2002 in Singapore and the Outback Coast Sea Life Festival 28 April to 5 May 2002 in Exmouth Western Australia.

'Celebrate the Sea' comprises lectures, underwater video competition, underwater photographic competition and a dinner award ceremony to support OceanNEnvironment's Save Our Seas Fund. Adding to the excitement of this event, we are pleased to present David Doubilet and Stan Waterman, two of the world's most celebrated personalities. David has authored and photographed over 50 articles for National Geographic, while Stan Waterman is one of the most acclaimed marine cinematographers, winner of five Emmy's and has been at the forefront of scuba diving and marine conservation.

To celebrate the richness of the region, and to emphasise the importance of its preservation OceanNEnvironment, will be launching 'Celebrate the Sea - The Indo Pacific Realm'- a definitive pictorial book highlighting the natural richness of the region. This book will be launched during ADEX 18 - 21 April 2002.

The aim of 'Celebrate the Sea' is to raise global awareness of the natural environment of the Indo-Pacific and the need to preserve it. The organisers also wish to highlight the standard of natural history imagery by photographers in Asia, recognising their excellence with the launch of 'Celebrate the Sea' underwater music video and photographic competitions.

PHOTOGRAPHY AND VIDEO COMPETITION

S$50,000 in prizes, download the entry form for full rules and regulations.

Professional and Novice Sections.

Special David Doubilet Award for Best Portfolio.

Special Stan Waterman Award for Best Video

EVENTS

Presentations by David & Stan at ADEX

Launch of Celebrate the Sea book at ADEX

Celebrate the Sea Photo gallery at ADEX

Award Ceremony & Charity Dinner at Raffles Marine 21 April 2002

An evening with David & Stan in Perth, Western Australia Outback Coast Sea Life Festival 28 April to 5 May 2002, Exmouth WA.

For more information on how to participate at ADEX 2002, please contact Ms. Michelle Tay at tel: +65 332 9629, fax: +65 332 9655/ 3374633 (michelletay@mda.com.sg ) or Ms. Pannida, at RAI Exhibitions (Thailand) Co., Ltd., tel: +66(2) 960-0141 ext 114, fax: +66(2) 960-0140 or email to pannida@bkkrai.com.

## BG Wildlife entries

Photographers have until 2 April 2002 to submit their entries. Forms are available in the January issue of BBC Wildlife magazine or from the web site www.nhm.ac.uk/WildPhoto.

# New products

## Tetra Pivot

Ultralight Control Systems, inventor of the original pivot for the Nikonos and housed cameras, has come out with a new pivot for the Tetra Digital housing. The pivot enables you to go from a horizontal format to vertical format with a push of the lever in less time than it takes your strobes to recycle. Vertical photogrpahs are now as easy to take as standard horizontal ones. This is especially helpful when using two strobes.

The Tetra pivot is manufactured with a handle for ease

in holding the pivot and housing. Ultralight's base adapters will need to be added and then you can use Ultralight Control System's arms.

Suggested retail price is US $174.95.

The tetra housing is made by Light and Motion Industries for the Olympus 2000, 3000, or 4000 series digital cameras.

Visit Ultralights web page at:
**www.ulcs.com**
for a dealer near you or call
(805)984-9104


## Light & Motion Olympus E-10/20n housing

Light & Motion continues to move forward in Underwater Digital Photography with the introduction of the "Titan".

The Titan is a "professional" housing that ushers in a new class of underwater digital photography.

The Titan housing provides full camera control in a user friendly layout. Housing provides access to both the optical viewfinder as well as the 1.8" LCD screen for instant feedback and accurate subject composition. Viewable data screen provides the user with all camera information. Flat port is standard and optional lenses can be changed underwater, so you will never have the right subject and the wrong lens again.

Titan is designed for the Olympus E-20n and E-10n SLR Digital Cameras. The Olympus E-20 is a 5 megapixel SLR that includes a 35-140mm lens, 4x optical zoom and high speed auto focus. The E-20 supports both Smart Media and Compact Flash which provide massive storage capabilities that enable the user to save hundreds of high resolution images.

For further details go to
**http://www.uwimaging.com**

## Coming soon!

The Aquatica 995 allows you to control all functions of the Nikon Coolpix 995 Digital camera. The A995's ergonomic design positions the viewfinder at a 45 degree angle, allowing for perfect handling. The wide angle lens on this versatile housing can be removed underwater to adapt to any situation. The housing comes with a standard TTL bulkhead.

Like all Aquatica housings,


the A995 is made of aluminum and all controls are double o ring sealed.

For further details visit
**http://www.aquatica.ca**

# Sea & Sea NX-80 Housing


Engineered exclusively to support the capabilities of Nikon's critically acclaimed new N(F)80D and N(F)80S SLR AF cameras, the NX-80 housing bridges the gap between amateur and pro systems.

It provides fast and accurate Dynamic Autofocus, 10-segment 3D Matrix metering, five separate AF detection sensors, focus tracking, focus and exposure lock, 2.5 fps continuous shooting, and the new "On-demand Composition Assist Focusing Screen."

Keeping pace with Nikon s advances in imaging technology and ever sensitive to diver preferences, Sea & Sea has crafted the ultra-compact, rugged and handsome NX-80 housing. The NX-80 features an efficient configuration of' user-friendly controls for precision execution of the camera's manual and automatic functions. Its ergonomics are complemented by Sea & Sea's unique one-touch self-locking button system, adjustable hand grips, and oversized, easy-access shutter release and autofocus lever. It features an external focus mode selector that enables autofocus and manual focus selection underwater, incorporates an MSC switch, built-in circuitry for a shutter-activated focus light, and a safeguard leak detector. The finder delivers a bright and contrasty high-eyepoint image, the illuminated LCD data panel provides clear and legible readouts.

The NX-80 incorporates Sea & Sea's exclusive Quick Shoe for single-step, tool-free camerato-housing assembly. An integrated system of bayonet mount flat and dome ports accommodate acomprehensive selection of Nikon and Sigma lenses, all with exclusive companion gears. The system is TTL compatible with Sea & Sea's celebrated lineup of strobes.

For more detail visit
**http://www.seaandsea.com**

# Ring of Bright Water

Inon's Quad Flash is one of the most innovative tools ever made available to underwater photographers. The four reflectors provide shadowless lighting with an ethereal quality all of it's own. The compact size is less intrusive than conventional strobes and makes animals much more approachable.

The Quad is packed with useful features such as an automatically activated modeling light to assist autofocusing and Nikon compatible TTL. To get creative there are three manual powers and a built in shade lets you block off two of the reflectors.

Available with ports to suit both Subal and Sea and Sea SLR housings. Quad from £995.00. Ports from £299.00. For a full review by award winning photographer, author and underwater photography coach Mark Webster see UwP Issue 2 at **http://www.uwpmag.co.uk**

# SEA TURTLE BALI CAMPAIGN

## The sea turtles in Bali need your help. Now!
## PROJECT A.W.A.R.E.
## by Kurt Amsler (Project Leader)

Project A.W.A.R.E., the environment foundation initiated and supported by PADI, is engaged in conserving the underwater world. Thanks to the active support of environmentally aware diving centres and divers, Project A.W.A.R.E. is constantly able to successfully campaign for the interests of nature, that is to say, of the fauna and flora that are threatened by human carelessness.

For more than ten years now, Project A.W.A.R.E. has repeatedly centred attention on itself and thus aroused worldwide interest. Thanks to the active support of countless like-minded people, Project A.W.A.R.E. has been able to carry out the following measures:

- International beach clean-ups
- Buoy projects in Spain and Egypt
- Artificial reefs
- Protect the sharks
- International spotlight campaign on “Threatened marine animals”
- Cooperations with tour organizers and airlines
- International media work
- Interventions in support of the underwater world at a political level
- International Reef Balls project and many others.

With these and many additional schemes, Project A.W.A.R.E. has succeeded in drawing people’s attention to what is for us the existential importance of an intact underwater world and thus giving us and our blue planet a chance.

The threatened sea turtles in Bali are the best proof that nature continues to depend on responsible people’s attention to what is for us the existential importance of an intact underwater world and thus giving us and our blue planet a chance.

The threatened sea turtles in Bali are proof that nature continues to depend on responsible people. Yet again, Project A.W.A.R.E. is not simply standing by and watching as thoughtless violators shamelessly murder these unique creatures. We have committed ourselves to protecting the underwater world and its inhabitants. And we shall continue to do this in the future.

You will see that, with your support, we will succeed in putting an end to these sad dealings of a small section of our society. And thus our appeal to you:

### SEA TURTLES

Sea turtles have been in existence for more than 200 million years, they are highly developed animals and have astounding skills. Although they are protected in Appendix 1 of the Washington Convention on the International

Trade of Endangered Species, sea turtles are still greatly endangered and threatened with extinction. The majority are caught because of their great commercial

*The turtle trade and the slaughter houses are under the control of a single person, a Chinese man called "Wewe". Actions have already been brought against him by KSBK.*

value and killed in a cruel fashion. The Asian markets are the most important customers for this bloody slaughter.

Every year, thousands of sea turtles choke in trawler nets and in the fish traps of the shrimp fishing boats. Sea pollution makes them ill and the masses of plastic floating in our oceans is an agonizing death-trap. There is the additional problem that more and more turtles are being driven away from their breeding grounds as hotels are built on the sand beaches.

## FOCUS ON INDONESIA

It may be a sad coincidence that the very first campaign by Project A.W.A.R.E. was devoted to the survival of sea turtles. "SOS sea turtles" - that was the name of the campaign at the time - concentrated on providing enlightenment and information about the extinction of threatened animals. The sensitivity that we created among divers and the public at large at the time had great repercussions.

However, nothing has changed on the island of Bali in Indonesia since then. More than 25,000 turtles are still slaughtered there every year. These statistics come from the most recent report from the Indonesian environmental organization "KSBK Conservation for Life" shows this. The turtles killed on Bali are "stolen" by the catchers not only in Indonesian waters but especially in Malaysia, Sipadan and even in Australia. In Bali you will find slaughter houses where the turtles are illegally and and contrary illegally and contrary to the CITES regulations, they are shipped abroad.

The turtle trade and the slaughter houses are under the control of a single person, a Chinese man called "Wewe". Actions have already been brought against him by KSBK.

Bright spot: A recently installed governor now has the say in Bali. Somebody responsible in government who condemns cruelty to animals and who has already confiscated some fishing boats and condemned two leaders of the turtle mafia to 18 months' imprisonment. In other words: Things have never looked so good and that is precisely why we MUST and CAN act now.

## THE “SEA TURTLE BALI” CAMPAIGN

In view of the already low population, the killing of more than 25,000 animals annually means a drastic loss worldwide. This is precisely why we cannot be indifferent to this senseless murdering! The first step in this “Sea Turtle Bali” campaign is to collect thousands of signatures, protest cards and statements that we shall hand over to the Balinese government in the full light of the media and with the necessary vigour.

## AND THIS IS HOW WE INTEND TO PROCEED

But we need your support for this!

Right below, you will find a signature list. Please do the following with it:

- Copy this list and distribute it among your friends and acquaintances. Tell them about the sea turtle tragedy in Bali and ask them to collect signatures.
- Pass your “list” around amongst your friends and acquaintances and collect further signatures.
- Send your signature list and those of your friends and acquaintances to the following address:

Project A.W.A.R.E., Oberwilerstrasse 3, CH-8442, Hettlingen (Switzerland), Fax +41 52 304 14 99.

Give the sea turtles a chance with your signature!

### SIGNATURE SHEET

**I condemn the cruel slaughter of sea turtles.**
**With my signature, I call upon you to put an end to this bloody tragedy.**

**Date** _____

**Name** _____

**Postal code/Town** _____

**Country** _____

**Signature**
_____

**Send your signature list and those of your friends and acquaintances to the following address:**
**Project A.W.A.R.E., Oberwilerstr. 3, CH-8442 Hettlingen (Switzerland), Fax +41 52 304 14 99.**

## WHAT ELSE ARE WE GOING TO DO?

Signatures and statements are part of the campaign. In parallel to this, we will:

- expose the awful dark side of this dream island to the media,
- send the media an eye-opening information poster,
- support the Indonesian environmental organi-zation KSBK Conservation for Life so that it can take effective legal action against the dealers in sea turtles,
- appear personally in the country and specifi-cally state our aims.

As soon as we see that actual steps are being taken to combat the slaughtering of sea turtles facts not words we shall change tactics and embark on positive advertising. Then we shall be happy to show the sunny side of this country.

Help us to put an end to the murdering of sea turtles. Collect signatures!

Further information
Project A.W.A.R.E.
Oberwilerstr. 3
CH-8442 Hettlingen (Switzerland)
Tel. +41 52 304 14 14
e-mail aware@padi.ch

All donations to:
Credit Suisse, sort code 4791,
account 850 293-81,
PADI A.W.A.R.E.

# “SEATURTLES BALI” Campaign UPDATE

Statement by Kurt Amsler -

“The PADI Project AWARE action to stop the slaughter of over 20,000 Seaturtles on Bali has triggered a lot of interest all over Europe. The brochure, which was send out to all PADI Members in Europe, had the desired effect and inspired many members to collect as many signatures as possible.

Until the month of October 2001, we received already 22.000 Signatures!!But we need more, much more!!! This is why I am appealing to any divers to invest some of your time in order to save the lives of many thousands of sea turtles.

Ask for the “SEATURTLES IN BALI” brochure at your nearest PADI Dive Center and put you signature in it.Further brochures can be ordered through Project AWARE: aware@padi.ch

The slaughtering of Seaturtles in Indonesia concerns us all!!

Because this decimation of sea turtles further reduces the chance of survival of this species, worldwide extinction is threatened. The island of Bali is only the trading center for the animals, who are caught in Sulawesi, Malaysia, Java, Borneo, Flores and even in the waters of Australia.

Apart from these facts it is the creatures themselves we have to be concerned about. Can you imagine how the animals are suffering when they are being transported for months in fishing boats where they lie on their backs tied down with ropes without any food or water!!! The cruelty of the subsequent killing of the turtles - they are being cut open alive - is indescribable.

Divers CANNOT just ignore something like this!!

This is why Project AWARE have started this campaign and this is why we need your help so that we can prove to the authorities that the rest of the world does care about the slaughter of Seaturtles in Bali.

We are convinced that we can achieve our goal, and everyone who supports us can be proud of having contributed towards ensuring the survival of Seaturtles in that region.

## Action “SEATURTLES BALI” and the Indonesian KSBK

The Indonesian animal protection organization “Conservation for Life” has become a valuable partner to Project AWARE in order to achieve our goal and end the slaughter of Seaturtles in Bali.

Thanks to this organisation two of the biggest dealers in Seaturtles have been convicted and have received lengthy prison sentences. Furthermore the organisation has good contacts with the government and they have agreed on a stricter application of the current law which bans the killing and marketing of Seaturtles.

This is demonstrated by two spectacular actions, which would never have been possible in Bali before. In July activists of the KSBK together with the police and the coast guards confiscated more as 550 sea turtles in Sanur Bali and other places. The animals had been collected there and were destined for transport to Bali and for the slaughterhouses of Tanjung Benoa.

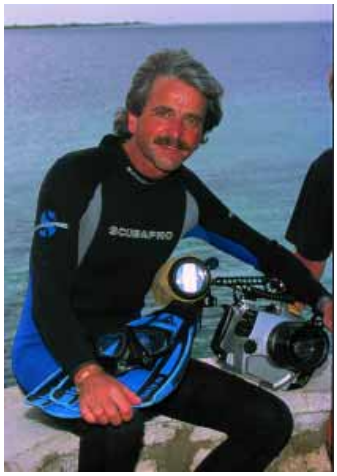
All this turtles were set free and released into the open sea.

The Aware Project supported this action with letters to the Government and donations.

You can see for yourselves that the chances of ending the slaughter of sea turtles are good. The government is sensitised and does not want the image of the island to suffer, which is why it gives the police and KSBK free reign.

I would like to thank all of you for your support!

**Kurt Amsler, Project Leader**



# HMS Royal Oak video


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

This new professionally produced 50 minute video includes underwater images of the wreck which have never been seen before and there are interviews with survivors and Orcadian Sandy Robertson who was the first diver to go on the wreck the day after she sank. Also included is coverage of another unique event when the ashes of Dorothy Golding, wife of Bandsman Arthur Golding, who went down with the ship, were taken down by her grandson, Christopher Kilford, and placed in the wreck to reunite the couple.

The finale is the unfurling of a battle ensign on the upturned hull by a Royal Navy diver on the anniversary of her sinking and the final credits include the names of all those who died in the tradgedy.

Running time 50 minutes. Narrated by Tom Fleming. Produced by Ocean Optics Ltd. Directed by Peter Rowlands

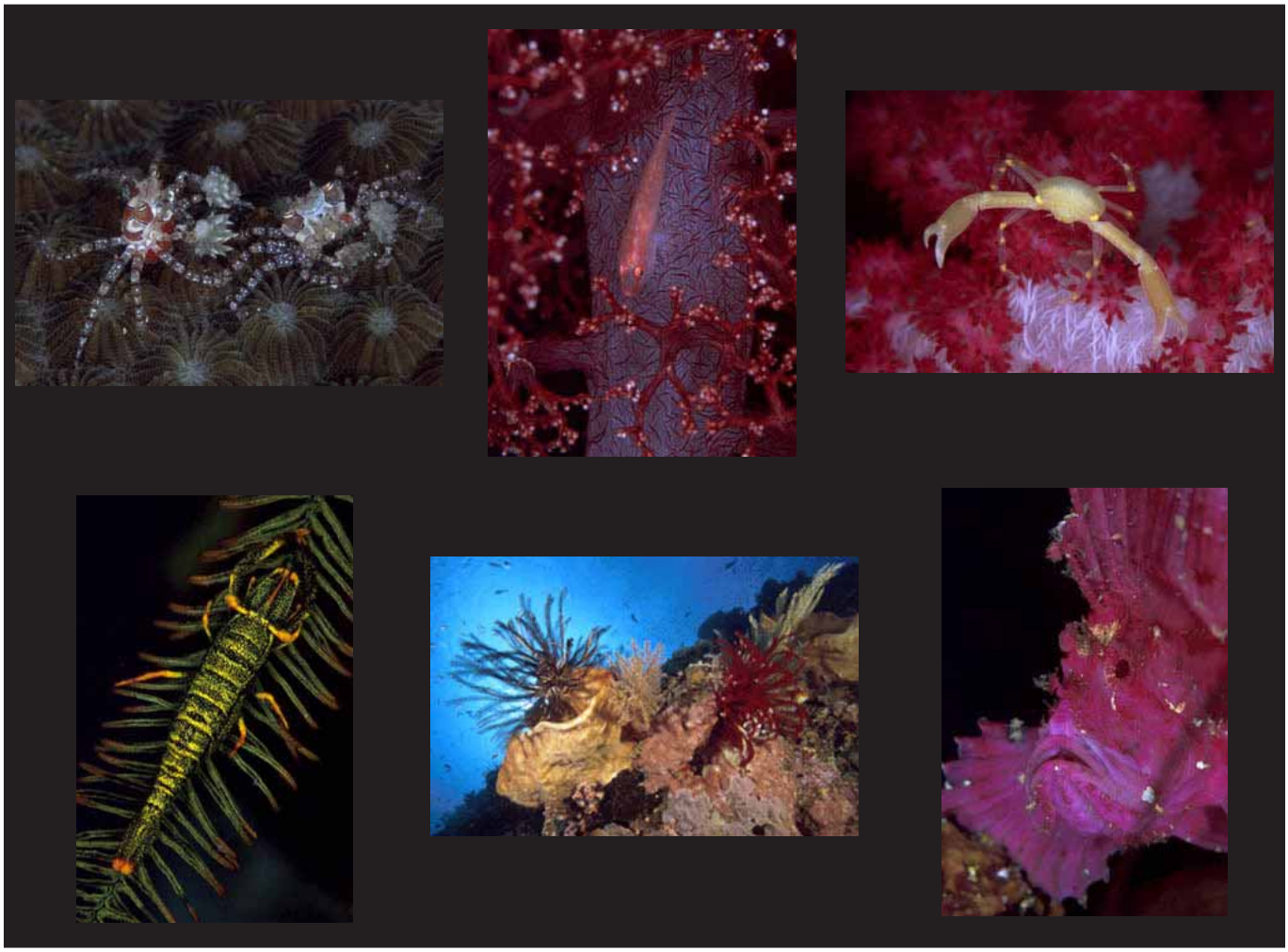
The video costs £16.95 (+£2.50 UK postage). Total £19.45. Please send cheques payable to Peter Rowlands and send them to: Royal Oak Video, 13 Langley Avenue, Surbiton, Surrey KT6 6QN. Credit card tel & fax 020 8399 5709

**http://www.hmsroyaloak.co.uk**

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

**Warm regards**
**Pamela Armstrong**
**12/1/02**

# Tony White
# and the BSoUP Open Portfolio Competition 2001



This annual event held in December is eagerly looked forward to by underwater photographers far and wide and is seen as the pinnacle competition in the society's yearly schedule of competitions. Comprising of six 35mm slides projected simultaneously, not only is the technical correctness of the photographs imperative but also the ability to layout the portfolio to give a feel of oneness. In other words when the portfolio is projected it blends together. In December 2001 Tony White was very proud to win this prestigious competition.

## THE PORTFOLIO

This year's winning entry for the open competition is the result of a visit to Manado, North Sulawesi, Indonesia in December 2001 where I had gone on my own with the sole intention of testing new equipment and trying out some new techniques (not new to underwater photography but new to me that is).

It was whilst at Antibe in November, being a long time admirer of a New Zealand Photographer called Daryl Torckler, I saw his portfolio entered in the festival and was inspired to run off to Indonesia to do this testing. All the shots were taken within the Bunaken Marine Reserve and for the sake of not constantly repeating myself the camera housing is a Sea & Sea NX90Z, the film I use for macro is Fuji Velvia for wide angle work it is Fuji Provia. The slides were numbered one to six and were shown in the order number one in the top left across to three, the bottom row consisted of shots four to six again left to right. So let's get on with the explanations

# A profile of Tony White

Tony was born in Blackpool in the North of England in 1952. His family constantly on the move, gave him an early appetite for travel. Eventually moving to North America with his parents, it is here that he finished off his education before returning to England to join the Royal Navy at the age of 15. Initially training as a Radio Technician, he spent the following four years back and forth to the Far East Station based either in Hong Kong or Singapore. At this point he decided that radio was not for him and applied to join the Photographic Branch, a small arm of the service with only 90 personnel serving the whole of the Royal Navy's photographic needs from public relations to highly technical engineering photography. Being successful, he spent the next 12 years gaining valuable experience, which ranged from studio work to aerial photography from Sea King Helicopters and Harrier Jump Jets and sometimes doing his processing in the sickbays toilets on a ship in a force 9 gale.

On leaving the Navy he spent 5 years in the Commercial photographic world, again working in the studio and the lab producing the finished article mainly for corporate clients, finally ending up as the production manager for a major south London professional laboratory. It was at this point he felt that photography had run its course. Not only did it have nothing left to offer him but he also had nothing left to offer photography. So, for the next 7 years he took up a post as a Sales Rep selling mainly into the Graphics industry, providing valuable technical support to customers, primarily dealing with printers and graphic houses so in a way still dealing with film and processors only this time it

*Shot one - is of two boxing crabs, no more that 2cm in size, they are only found in 2/3 metres of water, off one island in the reserve and three hours were spent looking for them. You can just see the eggs being carried by the one on the left as you look through the lens. You can also see why they have this name as they are constantly carrying out a boxing motion with the anemones they carry around on their claws. This was chosen as the top left shot as it leads you into the portfolio. Taken F90X camera with a Nikon 105mm lens with a x4 Nikon close up attachment, f22 1/100th second exposure special macro port and Inon quad flash on TTL.*

*Shot three - Is of a Gorgonian crab on a beautiful divaricate tree coral. Again he is tiny measuring no more than 3cm from claw to claw. Standing his ground he went into this defensive position and did not move for more than five minutes, which gave me plenty of time to shot from various angles. Again the quad flash has lifted the contrast of these intensive colours and has given the eyes a kind of fiery glow. This was chosen as the top right hand shot due to the crab being in a position bringing the viewer back into the portfolio. Taken F90X camera 105mm lens with a x4 Nikon close up attachment, f22 1/60th second exposure special macro port and Inon quad flash on TTL.*

*Shot two - A coral goby on divaricate tree coral. Again these gobies are very small and move around at tremendous speed, so it was a matter of patience until he settled down in this position. In my opinion the unique characteristics of the quad flash have lifted this image both in depth and colour saturation. This was chosen as the middle top shot because the goby is pointing down in a fairly neutral position.Taken F90X camera with a Nikon x4 close up attachment f22 1/60th second exposure special macro port and Inon quad flash on TTL.*

*Shot four - This crinoid shrimp on host crinoid is one of the most beautiful I have ever seen. Usually hidden within the tentacles of the crinoid this one was sat outside which made access to take this shot very easy, This image I feel is one of the most striking I have ever taken. Again the light from the quad flash has enhanced the colour and depth of the shrimp. Chosen as the bottom left shot facing upwards it leads the viewer into the portfolio. Taken F90X camera 105mm lens f22 1/30th second exposure Inon quad flash on TTL.*

was all black and white.

In his spare time Tony had by now entered the diving world. It was as a diving instructor working weekends for a local school that the owner a certain Dick Davies began encouraging him to start taking underwater photographs and for some time Tony was having none of it. Until one day Dick lent him a Motor Marine II and here is where the love affair started. Through the next 18 months he gradually gained confidence with his new toy and the frustrations of flooding it twic,e until came the day of decision either "do something with it" or give it up. So, after much deliberation and research he bought his first housing and camera a Nikon F90X and a Sea & Sea housing. Letters where duly sent off to all the UK dive publications with varying responses from 'who do you think you are', to 'yes we would be interested in looking at articles you produce'. From these early days some three years ago, Tony now writes regular articles for dive publications both in the UK and abroad. In pursuit of his dream he has become self employed joining his wife Pam's company and renaming it Sea of

*Shot five - Being the only wide angle shot, I consider it to be very dramatic, put into a diagonal giving a 3D view of these corals with crinoids. I had been experimenting with lighting to achieve more contrast and separation and in my view it has worked and is the way forward. Chosen as the centre bottom shot as a fairly neutral image. Taken F90X camera Nikon 17-35mm zoom lens at the 17 end f11 1/60th second exposure YS300 and YS120 flashguns set on full power with orange gels.*

*Shot six - Having seen leaf scorpion fish on a regular basis, this was the first one of this colour and I spent some time and film shooting him from various angles, this being the most dynamic. Chosen as the bottom left shot leading the viewer back into the portfolio. Taken F90X Nikon 105mm lens f8 1/60th second exposure special macro port and quad flash on TTL.*

Dreams Ltd. Together they are constantly looking at ways of earning a living from Tony's images supplying them not only to the major aquariums in the UK and abroad, but also corporate companies for advertising purposes. For Tony it is the pursuit of excellence which drives him constantly onward, trying out new techniques, the majority of which he learned as a land photographer - some work some don't.

For the last three years, he has travelled to some of the world's most inaccessible countries clocking up over 100,000 air miles each year. In 2001 Tony began to reap some of the reward of these efforts, winning the underwater category of the Afga African Wildlife competition held in Johannesburg South Africa, a gold medal in the grandmaster category of the international photo festival held bi-annually at the NEC dive show sponsored by diver magazine and most recently placed 6th overall at the prestigious film and video festival held in Antibe France.

**For further information on Sea of Dreams Ltd and its itinerary for 2002 visit www.seaofdreams.co.uk**

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OCEAN LEISURE

# Diving Komodo National Park

## By Ross and Diane Armstrong

*Komodo had some of the most colour reefs we have seen. Soft corals, sea fans and hard corals take up almost every space on this part of the reef. Nikon F90X, 16mm fish eye, Sea&Sea housing, F8 @ 125th, dual Ikelite SS200 Strobes. Kodak E100VS.*

*If you looked closely you could find tiny gobies and shimps on almost everything. In this case we found two imperial shrimps on a seacucumber. SubEye Reflex, 60mm, F16 @ 60th, dual Ikelite SS50 Strobes. Fuji Velvia.*

Two more blasts from Lisa's underwater horn indicated that she had found something special. This time it was a fire urchin with two Coleman's shrimps living on it. Between Lisa's horn, Sascha's rattle and Graham's tank tapping there was always something new to see. Not that is was difficult to find things ourselves, but four sets of eyes are always better than one.

We were diving in Komodo National Park (KNP), an area of 1,817 sq km located between Sumbawa and Flores in the Indonesian Archipelago. KNP includes four main islands, Komodo, Rinca, Padar and Palau Motang plus many smaller islands and rocks. Sixty seven percent of the park is sea where only traditional fishing methods are permitted. Two floating ranger stations, equipped with machine guns, ensure that practices such as dynamite and cyanide fishing do not occur within the park.

The marine biodiversity is incredible with over 250 species of reef building corals and more than 1000 species of fish so far recorded with new species still being discovered on a regular basis. The reason for the abundance and variety of the marine life is that Komodo National Park lies near the middle of the evolutionary epi-centre of tropical marine life on earth. In the triangle between Papua New Guinea, the Philippines and Bali you find more tropical marine species than anywhere else in the world. The further you travel from this area the less species you will find.

The reefs around KNP are still largely unexplored and difficult to get to. However Lisa Crosby, Sascha Dambach and Tony Rhodes have started a new liveaboard dive operation, Kararu Dive Voyages, which offers trips to Komodo National Park and other remote areas in the Indonesian Archipelago. Leaving from Benoa Harbour in Bali, the water temperature and visibility generally reduces as you get nearer to the park. We had visibility ranging from around 10m to over 30m and water temperatures between 23 and 28 degrees Celsius. The cooler water and reduced visibility are caused by upwellings of nutrient rich water and in these conditions we encountered the

*Pygmy seahorses are not what you would call common, but we found them at half a dozen different dive sites.Nikon F90X, 105mm fish eye, Sea&Sea housing, F32 @ 125th, dual Ikelite SS200 Strobes. Fuji Provia*

greatest variety and numbers of marine life.

We had wrongly assumed that we would be diving around Komodo Island but only had one dive there. Some of the best diving was around Rinca and Flores. At Rinca we dived a site called Cannibal Rock in Horseshoe Bay, happy to learn the site was named after a large Komodo dragon was seen devouring a smaller dragon rather than other reasons that may spring to mind about the friendliness of the locals. This area has been rated by many marine biologists as among the top five dive sites in the world for marine life.

At Cannibal Rock we encountered our first pygmy seahorses, including a rare yellow pygmy seahorse. Here we found our first fire urchins with resident coleman shrimps, zebra crabs sheltering between their poisonous spines. Adding to the colour of the reef were sea apples. These are large round seacumbers with colourful tentacles that they wave in the current for food. Colourful anemones were very common with many different species of anemone fish, although another unusual occurrence we witnessed at Cannibal Rock was that hawkfish and blennies have taken to living in the anemones, sometimes displacing the anemone fish in the process. Cannibal Rock was so special that we spent two full days there. This allowed us several opportunities to dive Cannibal Rock and some of the other excellent sites near by.

A night dive on Cannibal Rock is amazing, we did two and the noise of the reef at night is very loud, a real sign of a very healthy reef. On our second night dive we found a giant moray which gave us a real fright when our torch beams revealed it looking out of its hole. We checked the identification book afterwards and found they grow to 2.4m but looking at it in the dark it sure looked bigger and we were glad we did not encounter it out in the open.

All the night dives were superb; we particularly enjoyed night dives on sandy areas that seem to come alive after dark with weird and wonderful creatures. We found crocodile fish, squid, cuttlefish, mantis shrimps, decorator crabs, many species of sea pens with resident shrimps, crabs and gobys. Again the guides were excellent at finding the more unusual critters for us, although locating the source of the rattle sometimes proved challenging in the dark.

Not all the diving had poor visibility. On some of the outer reefs and islands closer to Bali the visibility averaged between 20 and 30 metres. These sites offered good wide-angle photography opportunities with large barrel sponges, soft corals, colourful reef fish and clouds of anthias hovering above the reef. We saw the occasional larger animals such as turtles, tuna,

*Visibility on some of the outer reefs was superb, with large barrel sponges and colourful schools of anthias. Nikon F90X, 16mm fish eye, Sea&Sea housing, F8 @ 125th, dual Ikelite SS200 Strobes. Kodak E100VS.*

*Finding a crab completed covered with stingy hydroids was what makes night dives in KNP so exciting.*
*SubEye Reflex, 60mm, F16 @ 60th, dual Ikelite SS50 Strobes. Fuji Velvia.*

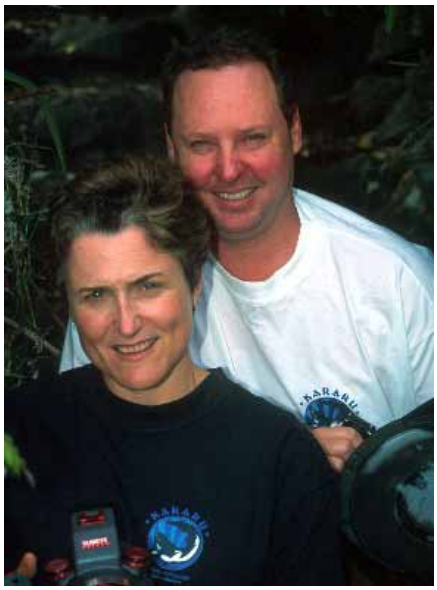
mobula rays, the odd shark and a single manta ray. However anyone going to Komodo National Park thinking they will encounter big animals on every dive are likely to be disappointed.

This is a place where little creatures, rare creatures and creatures so ugly they are beautiful, rule. We found more nudibranchs, crabs and shrimps on this trip than probably all the trips we have done previously. We soon gave up trying to remember them all and find them in the identification books on the boat; instead relying on our photos to make positive identifications. Sometimes even our guides had not seen some of the animals before.

Our previous trip to Bali introduced us to some of the wonderful diving available in Indonesia, but at Komodo National Park we were completely overwhelmed us with abundance and variety of rare and spectacular marine life. You know that a place is special when other divers on the trip, many of whom had done over 1000 dives all around the world, talk about seeing things they have never seen before after almost every dive.

If you want to find out more about diving in Komodo National Park visit Kararu Dive Voyage's web site at www.kararu.com.

**By Ross and Diane Armstrong**



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# Muck, Glorious Muck

## by Mark Webster

We can all understand the appeal of gin clear waters and the dazzling colours of the coral reef, but how many of us find the thought of a low viz excursion onto a dark sandy or muddy seabed in search of sea life enticing? Why would you, you might ask yourself, but this style of diving is becoming increasingly popular with those divers who have an interest in marine life or photography and they are willing to travel to the far flung corners of the world to pursue it. The big attraction is the diversity of fish and invertebrates to be discovered, many of which are small and very well camouflaged and so can present a real challenge to track down. Exotic locations such as the Lembeh Straits, Mabul and Tulamben are often referred to as the best by the connoisseurs, but do you really need to travel that far for a similar experience? I think not, and if you are prepared to explore some of our shallow river mouths and estuaries, perhaps as an alternative to begin with on a rough day, you might be surprised at what you can find.

The best topography to look for are the deeper estuaries which do not dry out a low water, offer shelter from poor weather and have a mixture of seabed conditions to include rock outcrops, gravel, sand and silt. My favourite spot on my own home patch is the Helford River estuary which offers a wide range of habitats and is conveniently positioned near some equally attractive aprés dive habitats, namely riverside pubs which are handy for post dive recovery. The topography is ideal and consists of a rocky foreshore of granite and shale, which extends as reef outcrops into the estuary, with small coves and beaches of pebbles and shingle which gradually degrades to a heavy grey granite sand. The sand line slowly pales and becomes finer at which point the first eel grass beds begin to appear. The Helford is one of the few locations in the UK where eel grass thrives and it provides a rich habitat for all manner of marine life. As the depth increases towards the centre of the estuary the sand becomes softer and more silty and is peppered with small reef outcrops. At high water the maximum depth generally ranges between 10-15m and the currents are negligible, but you do need to be aware of potential boat traffic in the centre of the river, particularly the silent ones driven by sail! Dives can be made from one of the small coves or by boat, but if you choose a beach dive, as I normally do, then this normally involves a bit of a trek with your kit, so small bottles are the order of the day.

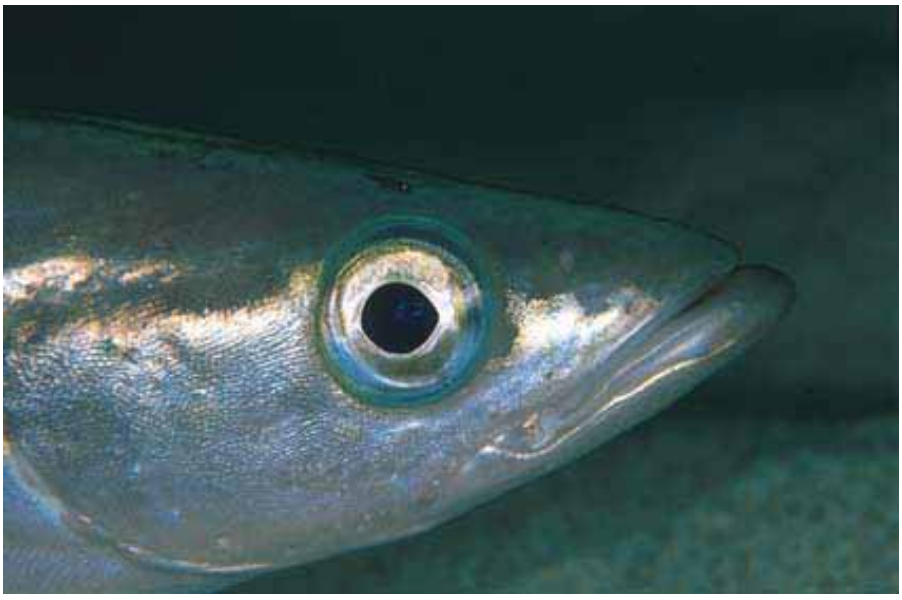
The visibility in the estuary will vary with the

*The shoreline at Durgan Beach provides easy entry following a few minutes walk from the road - Nikon F90X, 16mm fish eye, Subal housing, Elitechrome EX, f8 @ 125th*

*Nudibranch and eggs - There are a variety of nudibranchs to be found here, including some which are rarely seen on open water reefs. The early spring is the best time to find many species of nudibranchs and sea hares laying their spawn- Nikon F801, 60mm, Subal housing, YS50 + YS30, Velvia f11@ 60th*

*Tom pot blenny - The small outcrops of reef which are home to all the common rock pool species like this comical looking tom pot blenny- Nikon F801, 105mm, Subal housing, YS50 + YS30, Velvia f11@ 60th*

*John Dory - These elegant fish appear in high summer but are very difficult to spot in amongst the eel grass. Once you have spotted one be patient as they are naturally inquisitive and wil come to you eventually - Nikon F90X, 105mm, Subal housing, Inon Quad flash, Velvia f11 @125th*



*Pollack - If you dive towards the mouth of the river you will find many reef fish feeding on small fry. Pollack are notoriously difficult to get close to, but using a ring flash seems to disturb them far less - Nikon F90X, 105mm, Subal housing, Inon Quad flash, Velvia f11 @125th*

level of rainfall, but on average will vary from 2-3m up to 10m during calm dry periods in the summer. When the waters appear murky it is best to dive on the flood tide which will push some of the brackish water up river and often produces better visibility under a surface layer of 2-3m. A beach dive gives you the opportunity to explore the changes of habitat as you progress deeper, but you must remember to move slowly to avoid disturbing the bottom and look carefully for small life to get the best from this experience.

On calm days at high water the shallows are a good place to spot grey mullet foraging amongst the shingle. These look approachable from the surface but

they are shy fish and it will require a great deal of patience to get close to them. It is best to decide on the habitat to be explored for each dive and concentrate your efforts rather than try to cover everything in one dive. Even at high water the eel grass beds are no more than 50m or so from the shore and begin in depths of only 6m. This is a good place to start your searches as these beds hide a wide variety of species. Much of the eel grass is decorated with small anemones and peacock worms which reach up to feed in the currents. Exploring the base of the grass stalks and in amongst the dead stalks and sand is most productive and you will soon discover all is not what it seems. There are numerous spindly decorator spider crabs which suspend themselves between stalks almost like spiders on a web and the detritus on the seabed will reveal numerous pipefish, sticklebacks and in late summer juvenile cuttle fish only 25-30cm long. There are a variety of juvenile fish sheltering in the beds and also reportedly mane sea horses although I have never been lucky enough to see one, but they have been photographed in the area this year.

There are also well camouflaged hunters within the eel grass preying on the small and juvenile species. Patient observation will reveal scorpion fish resting on the bottom, often almost covered by weed and debris, and the elegant john dory which weaves its way slowly between the vertical stalks. Less mobile residents include several species of nudibranchs and sea hares which are numerous in the early spring. A tell tale sign of both species are the intricate spirals and twirls of their spawn on the base of individual blades of eel grass which will often lead you to the perpetrator.

Moving beyond the eel grass beds towards the centre of the estuary brings you onto a sand and silt seabed which is home to a number of bottom dwellers. The most common are dragonets,

*Topknot flat fish - Several species of flat fish are found on the sand, but topknots are most often found in fissures and shelves in the reef - Nikon F801, 60mm, Subal housing, YS50 + YS30, Velvia f11@ 60th*

*Decorator crab - Just like their tropical cousins these small crabs hide in the arms of snakelock*

topknots, dabs, plaice and if you are lucky the occasional angler fish and thorn-back ray. In the spring and early summer there are also adult cuttle fish which come into the shallow waters to mate and lay their eggs in the eel grass beds. Diving closer to the mouth of the estuary will reveal small schools of pollack in search of sand eels or juvenile species to feed on.

There are a number of reef outcrops which host all the usual shallow water species of anemones, sponges, wrack weeds and lettuce sea weeds. The shelves and fissures which dissect these rocks are home to edible crabs, velvet swimming crabs, prawns, squat lobsters and the occasional large common lobster who will boldly march out to meet your intrusion. In the summer months investigate the arms of the snakelock anemones which are often sheltering one or more decorator crabs which cover themselves in a fine cloak of sponge. Fish species include tom

*Juvenile cuttle fish - Juvenile cuttle fish, no more than 30mm long, begin to appear in early autumn. They are often almost completely buried in the sand with just their eyes showing. When disturbed they will go through the whole cephalopod repertoire in miniature including colour and pattern changes and tiny puffs of ink - Nikon F801, 60mm, Subal housing, YS50 + YS30, Velvia f11@ 60th*

*Pipe fish - Summer time is the best period to find pipefish, sticklebacks and if you are lucky, sea horses amongst the sea weeds. They are difficult to spot but will often lie motionless once found making them easy photographic subjects - Nikon F90X, 105mm, Subal housing, Inon Quad flash, Velvia f11 @125th*

pot blennies, black face blennies, leopard spotted gobies and shannies.

For photographers the best tool here is either a 60mm macro lens for the larger subjects or a 105mm macro lens if you are looking for the smaller shy subjects. The visibility is rarely good enough to use a wide angle lens, but on those rare days a 20mm will be useful for capturing the schools of fish or larger rays. Approach your subjects carefully so as to disturb as little sediment as possible and try to work into the tidal flow particularly if you have a buddy close by in order to minimise suspended particles. The shallow water depths means you can enjoy extended bottom times to adjust your eye to the terrain and track down those subjects hiding in it more successfully. Sites like these may never have the tropical appeal or the more flamboyant species of the far eastern destinations but they can be equally rewarding and produce some very satisfying photographic experiences.

## How to find Durgan Beach:

Durgan beach is on the Helford River just a few miles from the harbour town of Falmouth. Follow signs from Falmouth for the village of Mawnan Smith and then signs for Glendurgan Gardens and Helford Passage. Approximately 1.5 miles out from Mawnan Smith turn left at a crossroads sign posted to Durgan. There is no parking on the narrow road above the beach or in the hamlet of Durgan itself. You will need to drop your equipment at the top of the steep path down to the beach and park your car in the National Trust car park a few hundred metres back up the hill.

**Mark Webster**

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

# The wide angle zoom lens: friend or foe?

## By Alex Mustard and Peter Scoones

*Flexible friend. These two shots were taken on the same dive. A wide angle view of the reef, and a fist sized frogfish hiding in soft corals. Nikon F100 + 17-35mm. Subal Housing. YS 120 + YS30 on TTL. Ektachrome extracolour 100.*

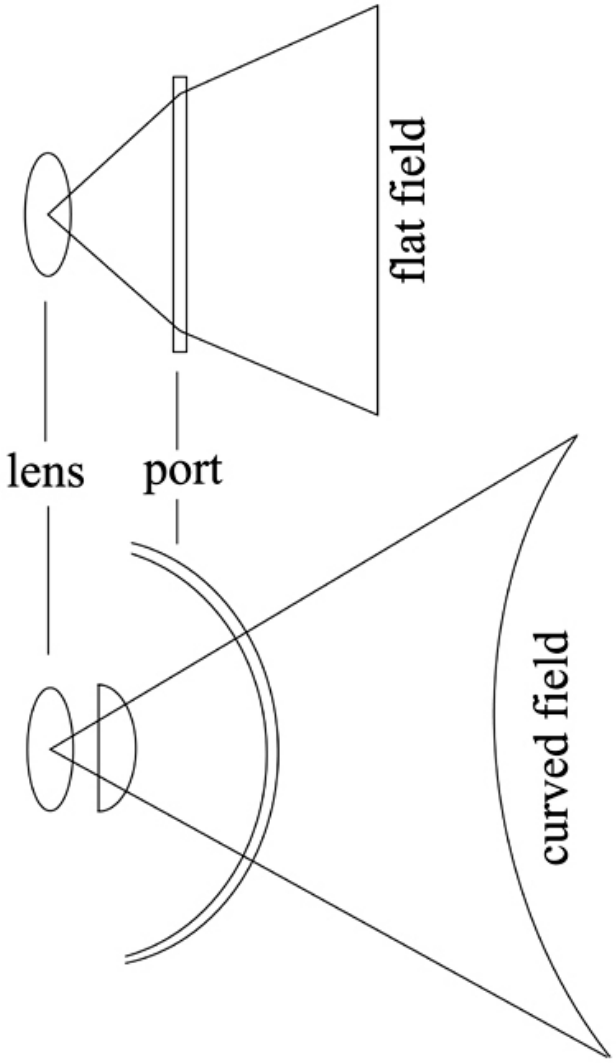
The world of technology, these days, is a very different place compared with a decade ago. For example and with apologies to the editor, we are writing this article for a magazine that does not exist, well not in the traditional sense! The pace of progress is remarkable.

The humble zoom lens has also benefited from the technology revolution, and a modern zoom lens is very different beneath the skin than a lens from even the early 1990s. Established wisdom states that zoom lens should be avoided by serious photographers because to work over a range of focal lengths their optics are compromised compared with a prime, fixed focus, lens. In other words, by attaching a zoom lens to our camera we are going to take pictures that are not as sharp or as saturated with colour as we would with a good quality prime lens. But technology has changed things. Computer aided design has provided solutions for the complex optical requirements of zooms, and has closed the performance gap with prime lenses. This is most true of the wide angle zooms, that are particularly applicable to underwater photography. So is now the time for underwater photographers to embrace the zoom lens?

There are many reasons why zoom lenses should be a favourite with underwater photographers. First, and with fear of stating the obvious, it is not possible for us to change the lens of a SLR camera underwater! Which is a pity, because most of the time UW shooting conditions are far from predictable. Good subject matter is an important ingredient in any photo. But part of the problem, and indeed part of the pleasure, of any dive is that we are never completely sure what we will encounter. A zoom lens affords us photographic flexibility.

Zooms have other benefits too; one of the basic rules of underwater photography is to keep the amount of water between the camera and subject to a minimum. This is because photographing through too much water reduces contrast, sharpness and colour saturation of a

*Flat port. Although still an acceptable image, this shot taken through a flat port lacks colour and contrast compared with the first two shots, which were taken on the same dive site on the same day. Nikon F100 + 28-70mm. Flat port. Subal Housing. YS 120 + YS30 on TTL. Ektachrome extracolour 100.*




*The refraction of light through a flat and dome port*

subject.

A wide angle zoom lens allows us to fill the frame with a subject from as close as possible. The slight loss associated with the optics of a zoom is meaningless if we can reduce the amount of water we are shooting through compared with a prime lens. The recent designs of wide angle zooms are a great benefit here, because many have a much smaller minimum focus distance than the older models.

Zoom lenses are also ideal for capturing the behaviour of underwater subjects. By controlling the focal length of the lens we can frame activity as required, while finding a working distance that does not disturb the subject. Zooms also allow us to try several creative techniques such as zoom blur and even to make effective multiple exposures without rewinding the film. And for trips abroad a zoom can replace at least a couple of other lenses, saving precious kilos of baggage allowance. Now you must be interested!

Not all zoom lenses are suitable for underwater use. A zoom with a really large range of focal lengths is impractical to house, and in addition most telephoto lenses have minimum focus distances which are too large to be useful underwater. The zoom lenses suitable for UWP fall into three categories: the macro (80-170 mm), the standard (28/35-70/80 mm) and the subject of this article, the wide angle zooms (15/17/18/20-35 mm).

Housing a wide angle zoom requires a bit of thought because lenses wider than about 28mm cannot be used behind a flat glass port without suffering considerable degradation of image quality. The main problems are chromatic aberration at the edges of the image, pincushion distortion and a reduction of the angle of view. To overcome these problems we use these lenses behind a dome port.

Domes are not free from optical problems and a most serious consequence of using a dome port underwater is curvature of the field.

This manifests itself as the plane of focus being much closer at the centre of the frame than at the edge, and the wider the field of view the more exaggerated the effect. Put simply this is great if we are

*Best behaviour. Zooms are excellent tools for capturing the behaviour of reef life, such as this parrot fish grazing. Nikon F100 + 17-35mm. Subal Housing. YS 120 + YS30 on TTL, f6.7 1/60th. Ektachrome extracolour 100.*

photographing footballs but useless for caves! The larger the dome diameter the less field curvature occurs. Small diameter domes suffer the "Buzz Lightyear effect" and can be particularly problematic and field curvature can result in detail at the frame edges being "beyond infinity" even at the lens's minimum focus.

There are custom made ports available for some older zoom lenses, but to make use of some of the most recently designed lenses we may have to come up with our own combination of dome and port extension rings.

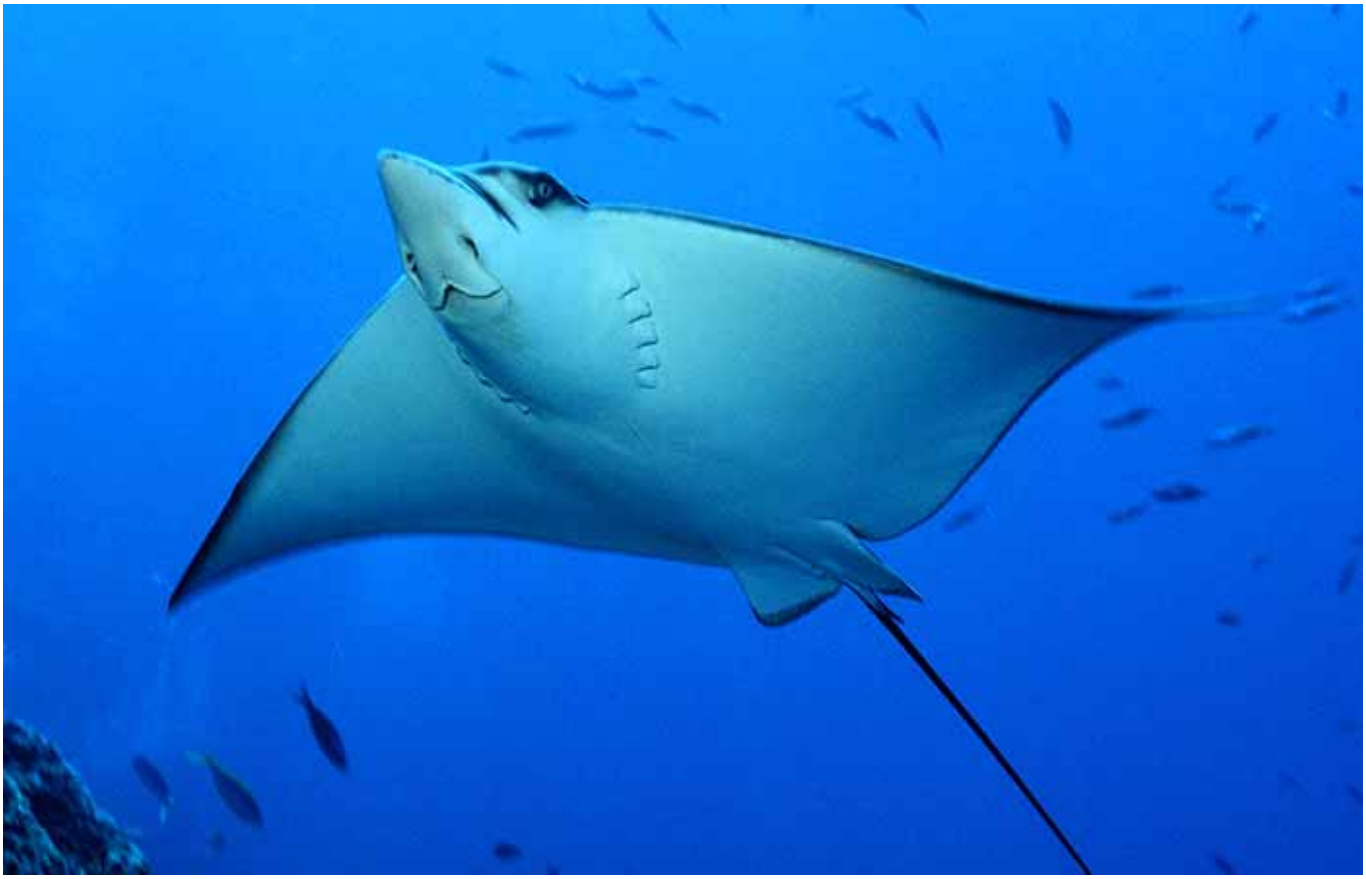
Therefore it is important to understand a little bit about the theory of dome ports and the specific requirements of zoom lenses to be able to make informed decisions about the port configurations we choose.

In the water, a dome port reduces the problems of a flat port, but also acts as a negative lens. To correct this, a dome port is used in conjunction with a supplementary positive dioptre, fixed to the front of the lens. The correct dioptre strength required for a dome port depends primarily on the internal diameter of the sphere prescribed by the dome; dioptre strength is simply calculated as 1000 divided by twice the internal spherical diameter, in mm, (e.g. a dome with a diameter of 200mm needs a +2.5 dioptre for compensation, sited 100mm from the internal surface of the dome). The required strength of the dioptre is independent of the focal length of the lens, and a single dioptre will work throughout the range of the zoom.

The position of the lens within the dome also influences the correction, and a practical approximation is that the dioptre should be as close as possible to the centre of the sphere of the dome. This is why it is important to use the correct length of port extension ring. A stronger dioptre is required the further forward into the dome the front of the lens is protrudes.

Lens positioning is a potential problem with zoom lenses because the barrel length of many lenses changes significantly during zooming.

Certainly, lenses which have large to and fro' changes in barrel length should be avoided because these may also see the sides of the port at their shortest focal lengths. Changes in barrel length, and thus the dioptre position relative to the dome, mean that the field will not remain focussed as the lens is zoomed. However, the typical movement of a lens is not that problematic for stills, because the lens can always be re-focussed. A more serious consequence is that the optical correction will not be exact at all focal lengths. For this reason it may be worth upping the strength of the dioptre a little because minimum focus may be



*Big shots. Wide angle zooms are also great for large animals, especially when we cannot be sure how close we will be able to approach. Nikonos RS + 20-35mm. YS 120 + YS30 on TTL. Ektachrome 100.*

more useful that infinity underwater. But if this is overdone the background will always be out of focus. The answer is to experiment. For those with deep pockets these problems can be avoided by using a lens with an internal zoom mechanism, that is the lens barrel does not change length.

Another consideration is that the large diameter dioptres required for wide angle zooms can cause internal reflections within the dome.

An efficient lens hood, such as a smaller port that is only a section of the hemisphere, can be used to shade the lens from unwanted light, so long as it does not cut off part of the image! Such a solution is also advantageous because the larger the dome of the port (even if we use only a section of it) the less field curvature occurs.

In the real world, it is not always possible to produce the perfect optical port configuration for practical reasons, such as the equipment available. For example, I (ATM) have not had any problems with reflections using a 77mm wide dioptre behind a Subal Fisheye port. But I made this port choice because I cannot afford (in hard currency or baggage allowance) a second, more suitable dome port! In the end a port/dioptre/lens configuration will be judged on its results, and such judgements will of course be subjective and personal.

To summarise, we hope these tips help to guide your choices:

1) select a zoom with the minimal front to and fro' movement, both in zoom and focus;

2) use the largest dome curvature that is practical;

3) use the smallest dome section that does not cut into the image;

4) select the correct dioptre;

5) set up the dome to dioptre distance accurately, using a port extension ring.

Traditionally zoom lenses have been thought of as compromised optics, but the results from high quality modern zoom lenses are hard to pick apart from prime lenses when used underwater - where so many other factors influence image quality. Zooms are not suitable for everything: prime lenses should remain our first choice when a shot can be planned in detail before getting into the water, and photographic equipment (film, flashes and lenses) can be optimised for that shot. But when we cannot control the variables, which is so often the case underwater, a modern zoom lens is a most valuable ally.

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**and Peter Scoones**
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# Compose yourself by Mark Webster

How often have you seen a competition winning picture and thought to yourself ëIíve got one just like that!í, but then realised that whilst the subject may be the same yours maybe hasnít got quite the same impact? What is it that makes one shot a picture of a fish and another a competition winner? The answer is almost certainly in the composition of the image and if you are prepared to concentrate some of your efforts in this direction you can easily make a seemingly dull subject look much more striking.

Most of us will have imitated the images of other photographers and perhaps without realising it applied some of the rules of composition. There are many books available on land photography which contain detailed descriptions of the rules of composition and how they need to be followed to produce a technically perfect and pleasing photograph. To begin with you may wish to apply these rules rigidly until they become familiar. Eventually you will instinctively follow the rules of composition and automatically apply a horizontal or vertical format to a subject and arrange the elements of picture without a conscious effort. So first we need to examine a few of these basic conventions, but remember they are only guides and we should not become obsessed with composing according to the rules as very often an image which breaks them all can be your most successful !

The most basic tool is the rule of thirds, which has been used by all the great classical photographers. Essentially it divides the image into nine equal sections by drawing three imaginary horizontal and three vertical lines through the frame. This enables the photographer to position key elements of the image within, or at the intersection of these areas to create a flow and a

*The centre of interest in this picture is obviously the fish. The remaining picture area is filled by moderate diagonals which support the fish placed in the centre 'third'. Nikon F90X, 60mm micro, Subal housing, F11 @ 60th , YS50/30 flash. 100ASA.*

*Wide angle pictures often present a variety of otions when composing the picture. Avoid the temptation to shoot the first location, be patient and look for the most striking composition. Nikon F90X, 16mm fish eye, Subal housing, F8 @ 60th , YS120 flash. 100ASA.*

*Although fish may not pose obligingly on a diagonal, you can remedy this by simply twisting your camera until the correct composition appears. Nikon F90X, 105mm micro, Subal housing, F11 @ 60th , YS50/30 flash. 100ASA.*

*Even the simplest of compositions can be improved by observing the rule of thirds and diagonal composition. Nikon F90X, 16mm fish eye, Subal housing, F8 @ 60th, YS120 flash. 100ASA.*

central focal point in the composition. For example, the most important feature of a fish will be its face or eye and mouth and these would be composed perhaps in the lower third of the frame to lead the viewerís eye over the subject. By using the rule of thirds you can achieve a better sense of balance in an image before you release the shutter.

A well composed image will the lead the viewer's eye to the focal point of the image. This may be the face of a fish or marine animal, an anemone or coral or a diver examining or searching for marine life. Whatever it is, the viewer must be able to immediately realise where the focal point is and what the photograph is trying to convey.

Perhaps the most popular method is to compose the main subject along a diagonal line running through the image which pulls the viewer's eye towards the focal point. Using the example of the fish once again, you might position the fish diagonally in the image, passing through two or more of the "rule of third zones" which leads the viewer's attention towards the head or eye of the fish. If the image were a close up of the head of the same fish then perhaps you would position the eye and mouth on an imaginary diagonal line to balance the photograph. This method is used time and time again in all types of photography, sometimes in a striking and obvious manner, whilst others are more subtle but none the less powerful.

Staying with our fish, now consider the perspective of the image. A side on shot, even composed diagonally will look flat and lack depth. But if the animal is positioned diagonally moving towards the camera instead then an impression of depth or length is achieved with perhaps the added impression of movement towards the camera. Look for backgrounds that contrast well with the main subject so that it stands out against it. Look also for opportunities to get below your subject to gain an upward view against open water towards the surface, which creates good contrast and that impression of distance behind it.

*Even in macro photography the opportunity to frame the subject will arise regularly. Wait for the right moment or change the orientation of the camera to achieve the most balanced composition. Nikon F90X, 105mm micro, Subal housing, F11 @ 60th , YS50/30 flash. 100ASA.*

Perspective is a particularly important consideration in wide-angle photography. You can use the diagonal line of the reef or a wreck to lead the eye away into the distance, perhaps towards the sun bursting through on the surface, to create a feeling of depth. This can be further enhanced by introducing an element of scale perhaps by having a small subject in the foreground, which is dwarfed by the background, or by including something larger in the distant background such as a diver or a dive boat on the surface. You can see that sometimes these elements are doing more than one job and it is often the subtle combination of techniques which is most successful in transmitting that feeling of "being there" to the viewer.

With experience you will learn to dissect the image you are viewing through the viewfinder and examine its compositional elements. By changing your position and twisting or moving the camera or just changing the format from horizontal to vertical, you can vary the composition until it is arranged in a pleasing or striking manner before you release the shutter. However, donít be afraid to break these conventions if they donít appear to work. Many of the most memorable images ignore them completely, so you must not become a slave to the rules of composition. Practice and develop your own style which uses the elements which suit your photographs, but above all donít lose sight of the fact that you are meant to enjoy it!

**Mark Webster**
http://www.photec.co.uk

# Panning, zooming and rear curtain sync

## by Tony White A.B.I.P.P

These are special in camera photographic techniques that have long been used for many years by both professional and amateur land photographers to add creativity to an otherwise boring shot. A stationary car can be made to look like it is travelling at 100 mph and people can be given movement whilst they are really standing still.

As underwater photographers we have a whole world ready made for these techniques. Like it or not a picture can be given movement and exaggerated colour, turning it from an otherwise boring subject to something that is both vibrant and can truly be called ART. So let us look at these three techniques and how we can apply them underwater.

*Leather Coral Zooming and rear curtain sync sea and sea housing F90X camera 17 to 35mm Nikon zoom lens YS300 and 120 on half power Fuji Provia 1/2 sec exposure f22 ( static subject no tripod hand held flash has given hint of colour in foreground)*

## Panning

In its simplest form panning is either when the photographer is stationary and the subject moving, or both photographer and subject are moving at the same speed. Let's take the first one first.

Using a diver as a subject getting him to swim past you at a set distance is the easiest way to test and perfect this technique. The key to success is a fluid panning action, usually from right to left and the correct shutter speed for the job. Using a F90X in a Sea and Sea housing with a 20mm lense set at f16 1/4th sec exposure, which makes the best use of available light allowing the diver to swim parallel in front of you. then start moving the camera to match the speed of the swimming diver. Before he is directly in front of you when the panning speed of the camera and swimming diver match gently press the shutter. It is important that the panning action starts before and carries on after the shutter has been pressed to create fluidity in movement and needs practise to achieve. It is also important to bracket the exposure to see which shutter speed f stop combination gives the most artistic result. In this instance I would also use f11 at 1/8th sec and f22 at 1/2 sec. What you will end up with is a photograph of a diver, his torso frozen limbs moving and a blurred background giving exaggerated motion to the subject. This can easily be practised

*Lionfish, rear curtain sync sea and sea housing F90X camera 17-35 nikon zoom lens at 35 end YS300 and 120 flashguns on half power Fuji Provia 1/2 sec exposure f22 ( slower shutter speed produces more exaggerated movement in subject and background)*

*Diver in wreck doorway Zooming sea and sea housing F90X camera 17 to 35mm Nikon zoom lense available light Fuji Provia 1/2 sec exposure f22 ( subject static housing on tripod for stability shows speed lines focusing on divers head in centre of frame)*

*Lionfish, rear curtain sync sea and sea housing F90X camera 17-35 nikon zoom lens at 35 end YS300 and 120 flashguns on half power Fuji Provia 1/15th sec exposure f22 (faster shutter speed produces less movement in subject and background)*

in your local swimming pool.

The second technique is when the photographer and subject are moving at the same speed can be applied simply when swimming down a reef knowing that you have a good chance that you will come across certain subjects. The important thing to remember in this situation is that the intent is there and your camera set up must be ready if the opportunity arises. There is a reef in Indonesia where I come across hawksbill turtles frequently. My F90X is set at around f16 at 1/2 sec exposure (dependent on the ambient light reading), so when the turtle swims off the reef into the blue, I am ready matching my speed, hopefully to that of the turtle. I position myself over the top of him and press the shutter which freezes his image but allows the background to blur again giving this impression of great speed. The key to success in this situation is matching your finning speed to that of the subject, when these match the chance of success greatly increases.

## Rear Curtain Sync

When we take a photograph with flash in its normal mode, the flash fires as soon as the shutter is activated. In other words at the very start of the exposure. When we put the flash mode to rear curtain sync the opposite happens. The flash fires at the end of the exposure, so if we had an exposure of 1/2 second the flash will not go off until the very end of the 1/2 second.

So once again we are going to use rear curtain sync in conjunction with long exposures to create an exaggerated sense of movement and when the flash goes off at the end of the exposure it will freeze and add colour to the picture. The reason for using rear curtain sync is that the long exposure will record lines of movement which can be very haphazard and jumbled. But when the flash fires, it records the final image on top of all the movement giving a sharp picture of the subject. If for instance we did exactly the same thing but using normal flash mode instead of rear curtain sync then we would have a final picture of the subject covered with movement from the rest of the exposure which would make it very

*Hawksbill Turtle Panning with rear curtain sync sea and sea housing F90x camera 20mm Nikon lens YS300 and 120 flashgun on full power Fuji Provia 1/2 sec exposure f22 ( because panning action not in line with turtle stretched moving image has occurred important to have camera and subject in line and both moving at same speed)*

**Note:**

When the two techniques above have been practiced, for the more adventurous, try combining them both in the same shot. The panning will give lateral speed lines and the rear curtain sync will give a sharper more colour saturated final picture, again practice achieves results.

## Zooming

This is exactly what the heading says. Using a zoom lense we can use a technique to make static subjects look like they are travelling at very high speed. I liken it to watching the Starship Enterprise on Star trek just as it is going into light speed. Because those flowing lines around the spaceship are the exact results you will get when you use this way of taking a photograph. Typical subjects are wrecks, highly coloured soft corals, and divers in a stationery position. This may sound complicated but it isn't. You will get the best results by using a lightweight tripod weighted down with some lead, but if this is too much then excellent results can be achieved by anchoring yourself in a steady position before shooting. Again practice this technique in the pool before shooting in open water. Fluidity of movement again is a key to success. So in open water using a F90X with a Nikon 17 to 35mm zoom lense in a Sea and Sea housing attached to a lightweight tripod, Choose a likely subject, perhaps a diver in the doorway of a wreck. Set-up the tripod at a distance far enough away so that when you zoom on the focal point it stays within the picture area. Take an ambient light reading again with emphasis on a long shutter speed I find between 1 and 1/2 a second gives good results. Starting at the 17mm end of the lense practice zooming through to the 35mm end. This is where the fluidity comes in again, the zooming must be a constant speed. When you are ready to take your shot start zooming first then fire the shutter and continue zooming after the exposure has been taken. This will give a constant image with no jerkiness to be seen. Again bracket the exposure. In this case I would bracket around 1/4 second using 1/8th and

indistinct. Again practice this in the pool. I have using wooden coloured fish, which are always on the move and give a good representation of the final image you could achieve in open water. Using a F90X in a Sea and Sea housing with twin strobes set to manual full power main light YS300 fill light YS120, in open water pick a subject not to small which is not likely to dart around too much. Lionfish have worked well for me in the past as a starting point. Take an ambient light reading with emphasis on a long shutter speed. I recommend bracketing around a 1/2 of a second. Set the flash mode to rear curtain sync, compose your photograph and fire. Head shots sometimes give an indistinct end result whereas a side view, I feel gives a recognisable sense of the animal. With distinct lines of movement it can enhance the colour of the background so choose one with saturated colours. Obviously the shutter speed is key to the final image 1/2 a second and longer will give an image with very distorted movement and not so sharp an end result, whereas a shorter shutter speed of say 1/15th a second will give slight movement around the fin areas and a very sharp final image. It's all a case of what you like, but again this technique adds impact and drama to many photographs.

*Hawksbill Turtle Panning with rear curtain sync sea and sea housing F90X camera 20mm Nikon lens YS300 flashgun on full power Fuji Provia 1/15th sec exposure f22 (background movement evident only flipper movement*

*Reef Scene Zooming sea and sea housing F90X camera 17 to 35mm Nikon zoom lens available light Fuji Provia 1/2 sec exposure f22 (exaggerated movement due to long shutter speed zooming from 17mm through to 35mm)*

1/2 second with the appropriate f stop. The speed of the zooming will obviously give different results faster. A more distorted image with longer speed lines slower a more distinct image with shorter lines. Obviously if you are deeper than 10-15 metres then the final image will be very desaturated in colour, so once practised this technique can again be combined with rear curtain sync. You will get all the speed lines but a more distinct sharper image with good colour saturation.

**Note:**

with all wide angle lenses I always use Fuji Provia 100F 35mm film.

## Conclusion

I have tried to keep the explanations of how these three techniques work as practical as possible with the intention of allowing photographers the opportunities to get in the water and experiment, without too much technical jargon which sometimes can be confusing. I hope this intent has worked and in some of you it will lead to a more creative way of thinking and greater awareness which will eventually lead to a form of underwater photography leaning very much towards artistry. If I have not achieved this aim with my explanations please do contact me as I will always endeavour to help where I can e-mail me on seaofdreams@btinternet.com

**by Tony White**

**seaofdreams@btinternet.com**

# A new set of eyes please

**by Demelza Postlethwaite**

Halfway through the pleasure/ pain seesaw of mounting transparencies, the precious results of a two week trip to Bali, I've pushed the whole lot aside, uncovered my duty free fags and made a coffee. Its not that I'm disappointed with the images laid before me, though I am considering the future use of a satay stick in an unthinkably cruel attempt to ensure that an ornate ghost pipefish is in the plain of focus from snout to tail, but I am confused.

Each of my transparency sheets are labelled with a basic code so that I can cross reference them with the notes made in my log book, nothing new to you I'm sure. The problem is that where my log book assures me that photographically the dive was 'fantastic', 'awesome', or rather embarrassingly 'British Gas here we come!' the competition will have nothing to fear from these films. Perversely, dives on which I bestowed accolades such as 'well, at least the water was warm' and 'only 16 shots taken' have produced the images that I'm finding most pleasing.

One question I am asking myself is "Have all the shots already been taken?" A well composed, in focus and correctly exposed image of a Frog fish or a Pygmy seahorse isn't necessarily enough anymore. Whatever the subject and no matter how charismatic the subject is to us on a personal level, someone else has already taken the shot and many underwater photography enthusiasts are simply chasing the opportunity to replicate it.

Perhaps it is time to take our underwater photography to the next level...art.

The images you see here were taken on a dive which my notes describe simply as 'nothing special' and the subjects are frequently encountered on almost every dive made in the Indo-Pacific. In addition to that, most of the shots show only a part of the animal and to those unfamiliar with marine life it's not even obvious that they were taken underwater. I ask myself "Does that matter?".

Only yesterday a non diving family member and veteran graphic designer caught site of a couple of these pictures. He was catapulted into over excitement and rendered speechless to discover that the photographs were taken underwater. If a visual image can elicit such a reaction in someone then have I achieved my aim even if the subjects rarity or natural history is, at that time, inconsequential to its audience.

The confusion I feel melts away with the realisation that the lack of stimulation I felt during the dive forced me to think harder about the subjects available to me . In future I will try and look at familiar sightings in a new or different way. I will move right around a subject and avoid simply shooting the side at which I have arrived and think about what the subject looks like on a very basic level then try and convey its structure or its movement in my image. My new years resolution will be not to exit the water with film unexposed.

Techniques to try when faced with a mundane or seemingly uninspiring topic include closing the aperture or increasing the shutter speed on your camera to produce a black background, removing many indications that the picture was taken underwater. It's not always essential to shoot in strict portrait or landscape format so twist the camera to produce the composition you are aiming for.

Experiment with light by positioning your strobe or strobes at an interesting angle and if your set up includes two strobes consider switching one off and use shadows to your advantage. Resist the temptation of smug acceptance when that delightful 'ping' of TTL reaches your ears and push your system a little harder.

As a cautionary note, I have a friend who is a technically perfect photographer but his pictures are unsuccessful because, in my opinion, they lack passion. Do not loose sight of what you are trying to achieve or forget the passion that led you take up underwater photography. If your own pictures inspire you then you have reached the nirvana of underwater snapping.

So, what have I done about it? I've just been for a shore dive here in Cornwall at the end of November (not a fan of the cold) with my camera, my best friend and my new set of eyes. I can't wait to see the results.

*Demelza teaches underwater photography at Cornish Diving*
**http://www.cornishdiving.co.uk**

# Fluorescence photography underwater

## By Pete Horsley

Often referred to as Ultra Violet photography, but strictly speaking in the application used here should be called Towards UltraViolet Photography.

How frequently in this computer age have you come across the term “What you see is what you get” Wizz ee wig. This nearly always applies to photography but as you will see where fluorescence is concerned it has no meaning.

### What is fluorescence?

A substance is said to be fluorescent if:

“The substance emits light or electromagnetic radiation having absorbed radiation or light of a shorter wavelength. Provided that the luminescence ceases within ten to the minus eight seconds after the excitation is removed”

This in short means that if you illuminate a substance with a certain colour of light, the substance will generate light of a different colour. Unlike conventional photography where you are recording an image produced by reflecting light off its surface, fluorescent photography records the image of the light produced by the substance itself.

Enough science, Why take these images at all? For me it started last year when I saw some stunning shots taken by the maestro himself David Doubilet.

Somewhat inspired by these images I set about trying to reproduce them for no other reason than I thought they would look good in my portfolio, little did I know what I was embarking on.

Like many things in life you jump in with both feet not having given any thought or research into what you are attempting to do. My plan of action was to set up the camera and tripod on the sea bed, illuminate the subject with what I thought was Ultra Violet light and do a very long exposure.

First mistake, a Nikon f100 in a Subal housing is a very light piece of kit, even in the calmest of waters off the Southern coast of Egypt it moves dramatically at the slightest hint of water movement. Long exposures are not possible.

Second mistake, was my light correct? My source could only just illuminate a white card placed less than a cm from it. I now have my doubts whether it was powerful enough to excite Fluorescence.

My conclusion after these first tentative steps was that I didn’t know what I was doing, back to the drawing board.

My first break came a week or so after my return when I received an e-mail from Mark Webster to say he had come across some information on Fluorescent Photography relating to the testing of pipeline welds under water. This was the start of the learning curve. Having mastered the differences between Fluorescence, Phosphorescence, Infra Red Luminescence and Bioluminescence it became clear that not everything I had done was wrong, there was in fact a million to one chance that I may have got an image from my attempt if I had perfect laboratory conditions. This of course was not going to happen in one lifetime so I needed to narrow the odds.

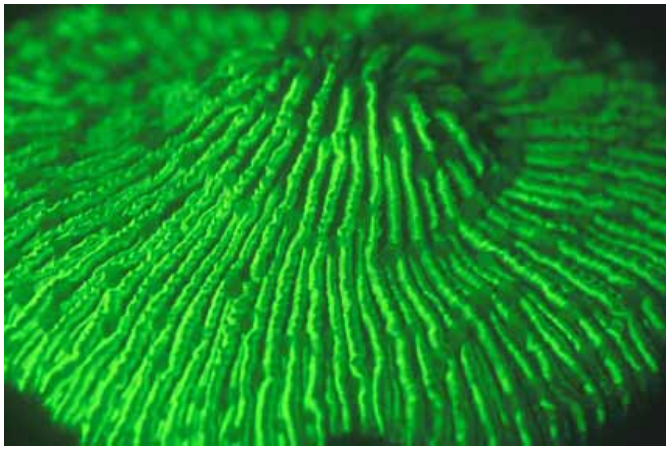
The type of fluorescence I was seeking not only occurred under true Ultra Violet light but could also be stimulated by light at the low end of the visible light spectrum. Visible light having a wavelength between about 400 and 700 nanometers. I needed to find a light source that could produce sufficient power in the 400 nanometer range. It was at this stage that Mark pointed me in the direction of the Nightsea web page.

Dr Charles Mazel had already done all the experimentation and development I

expected to have to do and was marketing the equipment Package necessary to get the images I was trying to reproduce.The basic kit contains :-

Ultra Blue Hand Torch- This allows you to find your subject

An Exciter Filter- A custom made filter to go over your existing flashgun to allow only the wavelength you require to exit the gun.



Above. Normal Light and Ultra Blue Light images of the same subject. All the remaining slides were taken with Ultra Blue Light at the specification below..

Nikon F100 in a Suball housing with 105 macro
Camera filter: NightSea BB62 barrier filter inside housing
Electronic flash: Sea & Sea YS120
Flash filters: NightSea BE3 exciter filter
Film: Fuji Sensia 400ASA
F-stop: f8/f11/f16
Camera focus: Operated in autofocus mode using NightSea DarkLight to provide illumination, then activated focus lock when ready to take picture and snapped shutter when DarkLight turned off.

A Barrier Filter - A filter that fits over your lens to filter out all the reflected exciter light from the subject. Thus leaving only the luminescence produced by the fluorescent subject.

A Blueblock Mask Filter- This filter fits over your mask so you can see the fluorescence underwater.

A Dark Light- This is a spotter torch that is mounted on top of the camera, when turned on it remains on for approximately five seconds then turns off for one and a half seconds.

Fluorescence is a very weak phenomenon and requires total darkness to allow the camera to capture the effect and do it justice. Armed with this basic equipment and with a little practice some extraordinary results can be obtained.The technique I have developed is suitable for housed reflex cameras, but this type of photography is not limited only to this set up. It doesn't require modification to your existing system and can easily be adapted to fixed focus systems, although by far the best results are obtained when you are working in Macro.

Having attached your filters to camera and flashgun, fit your mask filter and begin your dive conventionally with your normal dive torch. Your first dives will be quite awkward as you have to learn the method of operation, so I would suggest you pick a patch of sand surrounded by pieces of coral heads. Settle on the sand having checked you are doing no damage to the coral or sand dwelling creatures and have a look around, you will be working in near total darkness so familiarize yourself with your surroundings. As with any coral reef you do not want to cause irreparable damage just to capture an image.

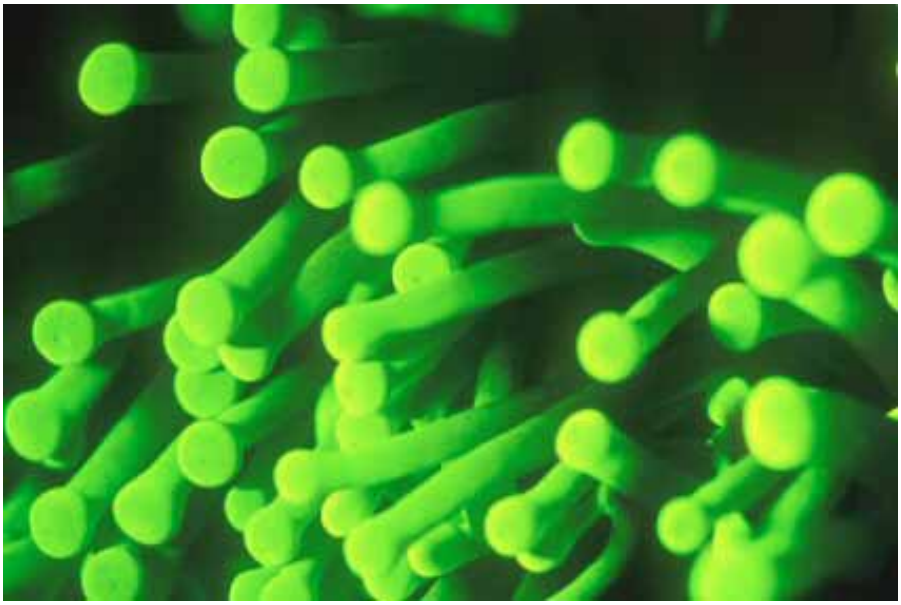
Put your mask filter in place and turn on your Ultra Blue torch and turn off all other torches (including your buddies). The reef will spring to life, when you do this for the first time it takes your breath away.

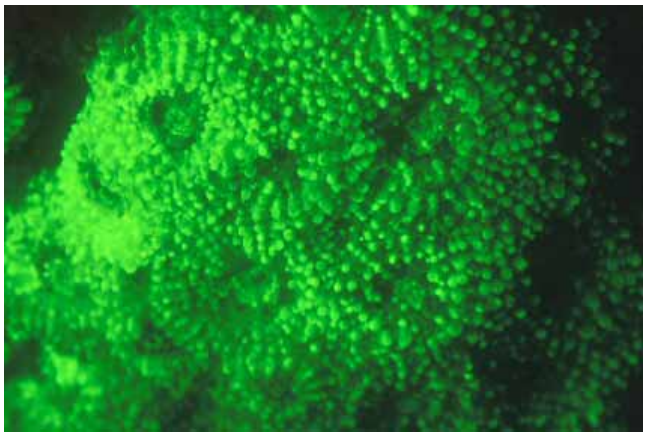
Everywhere you look on the reef there are the most amazingly complex creatures glowing at you, get in close and you can see fractal shapes of every description.

Now try and get that image.

The phenomenon although appearing bright to the human eye is low in power to the camera so you will find that you have to get your flash gun very close, working 1:1 or 2:1 produces very good results. TTL doesn't work well for these images so I would suggest using manual throughout. I found the trick is always to bracket your shots. Using a 400ASA ( Fuji Sensia) film, three images of the same subject shot at f8/ f11/f16 usually will produce one well exposed photograph. The fastest synchronized shutter speed will limit the amount of stray visible light getting to the film. Turn on your dark light and during its on period focus the camera, in my case I had the camera set on autofocus, while holding the shutter release at its half way position to maintain the focus, wait for the spotter to go out, in total darkness fire the camera. It is as simple as that.

In reality holding perfectly still until total darkness is a technique that requires practice. At the relatively large apertures being used your depth of field is very shallow so any forward or backward movement quickly takes the shot out of focus. Develop the film conventionally, there is no need to push or pull the film. As you can see from the two images of the Mushroom Coral it takes on a wholly different texture when photographed in the Towards Ultra Violet. A variation in aperture doesn't always result in what you would expect, one stop under exposure can produce a totally different looking image. The results shown here were taken at 1:1 and appear a bright green in colour. This, as explained by Charles Manzel, can be due to the distance the lens is from the subject, the further away you are the more red is filtered out by the water so if you go close to the subject a totally different colouration could result.





## Has it all been worth it?

It isn't often you achieve everything you set out to do but I can say that this time it happened for me. I am very pleased with the results, they provide an excellent alternate image during a lecture and can stimulate interest in shape, form and colour, all of which as photographers we look for underwater whether we are aware of it or not.

Something that was unexpected however was how Fluorescence can change a mediocre nightdive into something that resembles a firework display at Disney Land. If you want to try some thing a little different give it a go, you will be amazed at just how much life exists on what appears to be a piece of dead coral.

**Pete Horsley**

**Further information can be found on www.nightsea.com**

# Advice on buying a used Nikonos V

**by Peter Rowlands**


With the news that Nikon have ceased production of the Nikonos V it will become inevitable that new cameras will be hard to find leaving you with no alternative but to look for a secondhand one.

Since the Nikonos V has been in production since 1984 you could be looking at a camera which may be up to 17 years old but unfortunately there is no way of dating a camera as the serial number does not indicate the cameras age.

There is, however, one way of checking if the camera you are inspecting is a later rather than earlier model. Look at the battery compartment and if there is no chrome surround then this is an earlier camera. This modification was an improvement to the O ring sealing surface so priority should be given to a later camera. If it is an earlier model this should not totally eliminate it from your choice but, if you have an option, I would go for the later model.

The general external condition of the camera is a good indication of how the camera has been looked after. The diecast aluminium body is extremely hard wearing and will take a lot of hard work without affecting the internal mechanisms but you should give priority to the outer condition of the body.

## Shutter release lever

The first area to check is the shutter release button. When this is depressed it should spring back into place. Any sluggishness is an indication that there is a build up of corosion around this O ring and you would be advised to have such a camera serviced before buying it.

*(Above) Newer models have a chromed ring fitted around the battery compartment. Older models (left) don't have this ring*


## Wind on lever

The same is true to the wind on lever which should return smartly after the film has been wound on. Any sluggishness in this action should be taken as suspicious. A simple service of the camera should rectify the action but it ight be an indication that water has got past the O ring and coroded the wind on return spring.

Fire and wind on the camera to frame one and you should see the red LED exposure indicators in the viewfinder. If they don't appear it may be that the battery needs replacing. If this doesn't solve the problem the camera could need an expensive repair. Shade the lens until the triangular light to the right lights up and fire the shutter. There should be a noticeable slow shutter speed as the shutter first opens and then closes. If there is just one sound there may be an expensive problem with either the shutter or the electronics.


*Take the lens off and look into the shutter blades. These must be clean and have no signs of slight corosion*

## Film sprockets and take up spool

Having opened the camera back, set the shutter speed dial to "R" and you should be able to rotate the film wind on sprockets freely in either direction. Also check that the film take up spool can be rotated in each direction (whatever setting the shutter speed dial is set to). Failure of either of these tests is a good indication there is internal corosion which could be expensive to rectify.

Remove the battery holder in the base of the camera and carefully inspect the black plastic which surrounds the centre contact.

It is a fairly common problem that this plastic can crack and cause intermittent power to the electronics. The camera may be working fine but with such a battery compartment there is always the possibility the camera will stop working when you least want it to.

To rectify such a fault is expensive as the whole camera has to be taken to pieces to gain access to the inner battery compartment.

Next remove the flash port plug in the base of the camera and check the condition of the contacts. The two smaller contacts are sprung loaded and should be standing about two millimeters proud. The other three solid pins/contacts should be shiny. Any traces of corosion in this area will be expensive to repair.

Finally test the flash TTL performance as follows. Make sure you are wound on to at least Frame 1 and fire the flash straight into the lens with it set at the widest aperture (F2.5 on the 35mm lens). When you fire the flash you should get a very small flash and a very fast recycle time.

Now cover the lens with a lenscap or place the camera face down on a solid surface. When you fire the flash now the output should be much brighter and the ready light will blink a few times, go out and then the flash will start to recycle. This indicates that the flash has fired at full power and that your TTL system is working fine. Any deviation from this indicates that a repair will be neccessary.

Finally it's worth asking the owner about any previous service history. Just as with cars, a cameras value is enhanced if documentation can be produced which shows that the camera has been regularly serviced.

I hope this article hasn't frightened you too much. There are loads of good condition cameras for sale out there and if you follow the tests in this article you should be able to make a purchase with confidence.

**Peter Rowlands**
**Authorised Nikonos repairer**
**repairs@oceanoptics.co.uk**

# Talking ‘bout my generation

## By Alexander Mustard

YUP, or to give it its full title, the Young Underwater Photographers group does exactly what it says on the tin - a group for underwater photographers under the age of 30! You haven’t heard of us before? Don’t worry, this announcement is pretty much hot off the presses, the group was only started in 2002.

This group came about for one reason - as we all know, it can be pretty hard work for anyone to get into underwater photography. This is especially true for young people, as there are so few of us taking pictures. Making the right choices when starting out is essential, and mistakes are costly. YUP is here to help. The initial aims of YUP are to encourage more young people to get into UWP, to provide an information resource for UWP and to put young photographers in contact with each other.

At present, we are in the process of getting the group up and running and are trying to recruit members. Joining the group is FREE, but the entry requirements are pretty stiff: you must be 1) under 30 years old, and 2) interested in underwater photography! Because this group is based on the Internet, we really hope to attract photographers from

*Hattie, waterbaby. Canon EOS 500N, 28-70mm. Photo by Kathryn Westaway (UK).*

*A raggedtooth shark in South Africa. Nikon F100, 24-70mm. Subtronic flash guns. Photo by Andrew Pugsley (UK).*

*Models. Nikon F801. Photo by Szymon Kobusinski (Poland).*

*Diver exploring a Scandinavian lake. Nikonos RS, 13mm FE. Photo by Jukka Nurminen (Finland).*

all around the world to get involved. As you will see from the photo captions: we are quite an international bunch from the outset.

So whether you are "stuck" snapping away on a desert island in the middle of the ocean, or are shooting in a swimming pool thousands of miles from the coast, YUP is for you. If you are just starting out, please get in touch (and that goes for parents of potential YUP members too). If you can avoid some of the mistakes we have made, YUP will be worthwhile. If you are interested in joining please send me an email, at atmu@soc.soton.ac.uk.

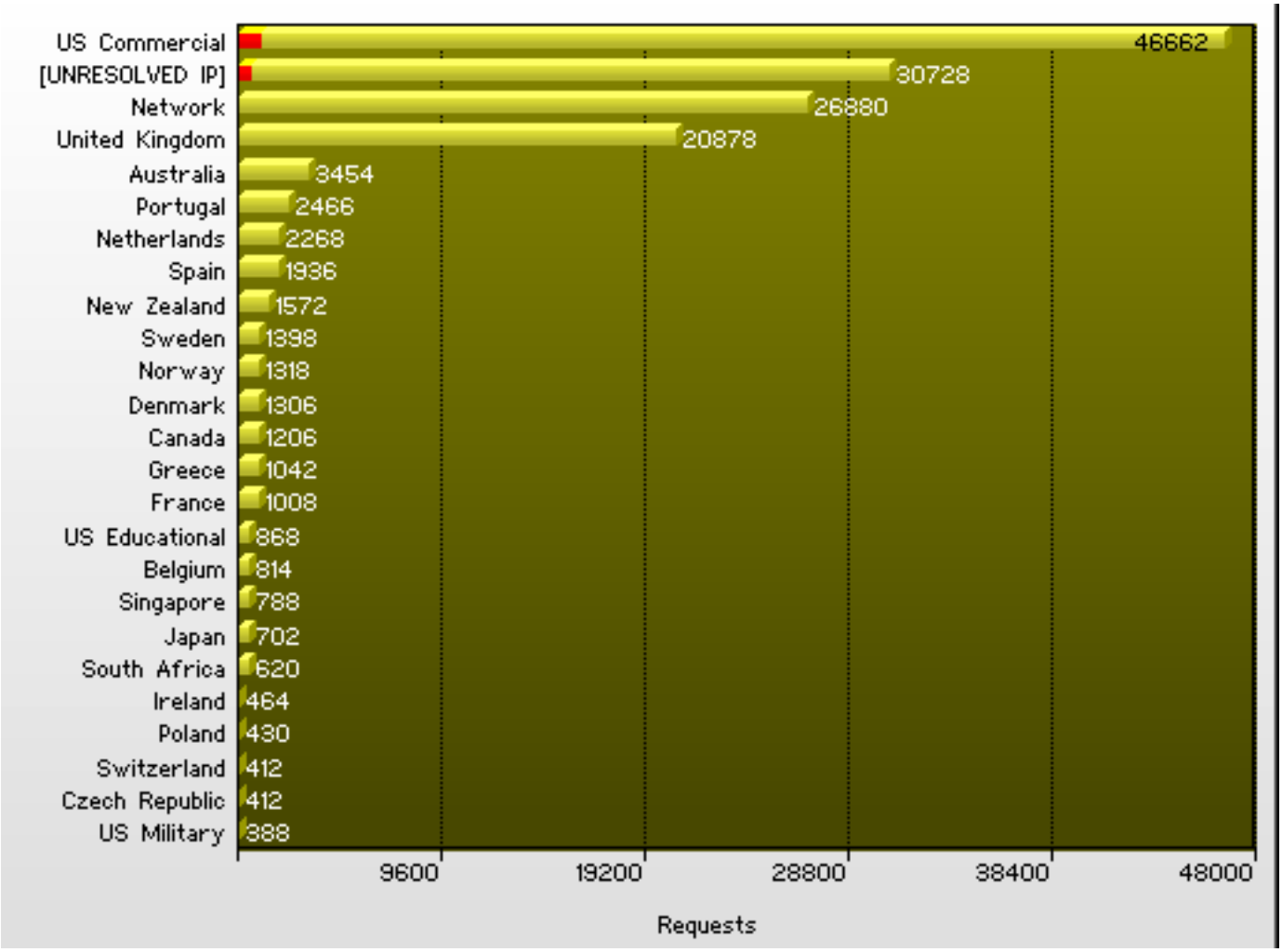
The YUP website is the core of our activities, the URL is **http://www.yup.org.uk.**

It contains a comprehensive set of links to the Internet's resources on underwater photography. There is information on equipment: with links to camera, housing and flash manufacturers, and links to shops. There are also links to resources on underwater photographic techniques and links to various underwater photography societies. Finally, there are links to the personal websites of YUP members, and to make us all green with envy, websites of some of the world's top underwater photographers. The website also contains a diary of forthcoming events in the world of underwater photography, such as competition deadlines, talks, conferences and festivals.

The website, of course, contains some of our photos, with a small gallery for each photographer, a photo of the month and there is even an "oldies" gallery for pictures taken by photographers when they were less than 30, even if they no longer are!! The site also has short biography files of each member, with topics including photographic style, kit, ambitions, favourite locations and favourite photographers, as well as our silly mistakes! The biography pages contain each member's email address so that you can get in contact with members with similar interests. Email is also used for discussion within the group and to encourage each other in both taking pictures and using them (for articles, competitions etc).

On a personal note, one thing has stood out in the photos I have beensent for the website, that is that Young Underwater Photographers love to break from photographic convention. The galleries are full of techniques that are uncommon in underwater photography. So next time you are surfing the net, check out www.yup.org.uk. Not only are there some inspirational images, but the website is a great source of information for young photographers of all ages!

**Alexander Mustard**




# Your advert could be here

Each issue of UwP is downloaded over 25,000 times by underwater photographers worldwide. We can supply statistics to show this.

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**For sale**
Nikonos V (Orange) complete with 35mm f 2.5 lens and Nikonos Flash Adapter (allows camera to synch with any flash unit) plus Sea & Sea YS60 TTL/N Strobe light with Hot Shoe Mini Arm for use with Nikonos. All of the above equipment is brand new and boxed and never been used. Will accept £950.00 for complete kit.
Please e-mail Doug Currie at doug.currie@dial.pipex.com

**For Sale.**
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Put your slides into high res. images.2,720 x 2,720ppi optical, 10bits/channel RGB with 8bit output, but as 64 dithered tones rather than the more usual 256. SCSI2 interface, SCSI card & cable included. Takes mounted 35mm slides. Manual Advanced Photo System cartridge holder supplied, along with 35mm filmstrip holder. Very good condition - Offers around £100. + postage etc.
Contact Jim Anderson at 01506 511 801 (evenings) or pref. e-mail jander4454@aol.com

**For Sale.**
Nikonos V body, 35mm lens (plus spare with slight damage), Substrobe Ai TTL flash, Ocean Optics closeup attachment, Subawider III attachment, Set of three Sea & Sea Macro tubes, Case. £899 ono Phone Colin on 02380 273017 (Eve) or 01264 345522 (Day) or email crichmond@pettywood.co.uk.

**For sale**
Bowens Copytrans slide duplicator £50
3 x Bowens studio flashes 200D £50 each inc stands
Contact Peter Rowlands
020 8399 5709 (UK) or e mail
peter@uwpmag.co.uk

**For sale**
Complete SLR Housing / Camera. SeaCam Housing: SeaCam MiniCam Pro Housing for Canon EOS5, Double strobe connection, with Moisture detector; SeaCam SeaFlash 350 TTLUnit; all connectors, gears, arm, chargers, cleaning kit & spares; various dome ports, Carry Case:
Canon EOS 5; Canon Macro 50mm F2.5 Lens (NEW in box); Canon Wide Angle Zoon 20-35mm EF F3.5-4.5 USM Lens; Cannon Zoom 100-300mm F4.5-5.6 USM Lens; Flash 300 EZ Speedlite (28-70); Camera Bag: £4500 Contact: julie.howell@compaq.com

## Photo courses

Martin Edge, author of the best selling instructional book 'The Underwater Photographer' guarantees that he can improve your images. Martin has scheduled two weekend courses for 2002. The dates are 23/24th February and 16/17th March. A Nikon SLR and Housing course is planned for 2/3rd November 2002. Limited spaces available.

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

For more details Phone Martin or Sylvia on 01202 887611 or e-mail Martin.Edge@btinternet.com

## Book a classified in UwP

A classified advert in UwP will be downloaded over 20,000 times by underwater photographers worldwide. You can sell or buy your equipment for a flat fee of just £5 (**or £10 with a coloured box surround)** payable by Visa, Mastercard or cheque.
Your advert can include up to 50 words and will be read by over 20,000 underwater photographers.
No othermagazine can offer such a concentrated circulation.
We recommend that you use e mail as your contact address.

## A classified advert in UwP costs just £5

**E mail the text of your advert to classifieds@uwpmag.co.uk. You can include your credit card number and expiry date or fax it to 020 8399 5709 or send a cheque payable to:**
**Ocean Optics Ltd,**
**13 Langley Avenue, Surbiton, Surrey KT6 6QN**

# Improve your image

## Subal

The legendary housing of choice for many of the worlds top underwater image makers.

Now available for the Nikon F100.

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These are the ultimate strobes. With fast 2 second recycling, optional laser aiming light and colour temperature control, prices start at just £749.


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Offering the most versatile macro system in the world today, Nexus make possible extreme close up photography unavailable from any other housing line.

## Nikonos


The classic underwater camera. We stock the range and have a fully Nikon authorised workshop facility.

Our aim at Ocean Optics is to keep you shooting. That's why we provide a full servicing facility in our own workshops for all Nikonos, Nexus and Subal equipment we import. We even have loan equipment for those impossible deadlines! If you choose to be an Ocean Optics client, you will benefit from the best support in the business

## Bonica

The Snapper builds into a neat system capable of creative pictures down to 150 ft, even in low visibility. It's so simple to use and, with prices starting at just £129, it's stunning value for money. This really is a breakthrough in price and performance. There's no better introduction to underwater photography.

# Ocean Optics

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