

Underwater Photography



a web magazine

April/May
2002

El Hierro

Secret Bay

**Environmentally
friendly?**

Lembeh in peril

Manado

Relationships

Fish portraits

Infrared film

O ring maintenance

Nikonos? Subal? Nexus?



Bonica Snapper

£99 from Ocean Optics

Photographer?

Andrew Pugsley

Ocean Optics Saturday staff

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Underwater Photography

a web magazine

April/May 2002

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Ocean Optics News, travel & events

Optics helps HDS with LIDS Exhibition

Last summer Andrew (AJ) Pugsley and Steve Warren were lucky enough to be invited to dive in standard or heavy gear by Peter Wingett and Cheryl Hugil. Peter and Cheryl have long been clients of Ocean Optics and arranged for the boys to dive under the auspices of the Historical Diving Society in the Atlantic Tank at London Aquarium. At the London Dive Show they were able to put something back by supplying camera and diving equipment for the HDS stand which took underwater photography as its theme. Many of Britains pioneers contributed equipment and their presence to the show.

Optics took along a selection of cameras from the 1970s as well as a rare Calypsophot and bulb flash obtained just 72 hours prior to the show. The lads also displayed several twin hose regulators and diving accessories from their personal collections.



South African wildlife photographer Edwin Marcow, HDS officer John Salsbury and AJ Pugsley from Ocean Optics at LIDS

Visions in the Sea 2002 - November 16/17th 2002

Visions in the Sea began after Steve made a throw away comment during a wine soaked Optics event.

Colin Doeg took the comment seriously and all attempts to put the genie back in the bottle failed.

In 1997, unsure as to whether anybody would even turn up, we threw our first Visions conference at the London Aquarium. Our top speaker was the Ikan marine life guide publisher and renowned underwater photographer Helmut Debelius. And making his debut presentation was a little known Greek by the name of Constantinos Petrinos.

The conference was a sell out and the rest, as they say, is history.



Discussing the latest developments in strobe lighting with Gary Clarke.



Delegate Jukka Nurminen and speaker Alex Mustard from the Young Underwater Photographers Group during a slide clinic.



Constantinos Petrinos (left) at Visions 2001



Checking out entries for the print competition. Tony White won the grand prize of a Nikon digital camera presented by London Camera Exchange.

Since then presenters have included Martin Edge, Mark Webster, Donald Tipton, Douglas David Seifert, Kurt Amsler and Peter Scoones.

This years conference is expected once again to be a sell out. The event takes place at Imperial College, London November 16th and 17th. At the time of writing speakers had yet to be confirmed.

It is known that a special evening one man show will be presented by top underwater cameraman Peter Scoones.

SLR pool Intros in London



Ocean Optics new SLR Course will provide clients with the opportunity to use state of the art equipment like this Nikon F100 under experienced supervision.

Ocean Optics is set to begin running pool based introductions to underwater SLR photography. Recognising that potential underwater SLR owners find it difficult to try equipment before making purchasing decisions, the Optics team hope the hands on experience will help clients better understand the pros and cons of different equipment combinations. Workshops will take place in central London in cooperation with City Divers and diving equipment rental is available.

To maximise the learning experience Optics has invested in Ocean Technology System radiophones to enable instructors to coach students under the water.

The full day program will include classroom sessions and will cover the benefits of SLRs underwater, lens selection, strobe choices and will be illustrated with images by some of the finest underwater photographers. Students will get to shoot with the latest Nikon camera bodies and lenses including the F100 and F80.

According to company owner Steve Warren “ this is one more indication of Ocean Optics intention to be much more than just an ordinary retailer. We’ve already invested heavily in staff training, sending members of the team to the Red Sea to observe video taping for Blue Planet, to South Africa to shoot sharks and on courses run by Kurt Amsler and Martin Edge. We’ve organised workshops for clients with Kurt, Linda Dunk and Constantinos Petrinis and we run the annual Visions in the Sea conference. We’ve recently launched UWP and the new pool events continue our drive to offer the best all around support to our clients”.

Please contact Ocean Optics on 020 7930 8408 or e mail optics@oceanoptics.co.uk

Help!



This American made housing for a 16mm Eclair movie camera seems to date from the early eighties. Recently added to our housing collection we’d be delighted to hear from anyone with information about it. We’re particularly keen to find out which productions these fully professional outfits might have been used on.

Any help would be greatly appreciated.

Please contact Ocean Optics on 020 7930 8408 or e mail optics@oceanoptics.co.uk

Computer Concerns with strobes

Dive computers that monitor gas pressure via a radio link can be affected by underwater flashunits. Sometimes the transmission of this information is briefly interrupted when the strobes fires and then the units reconnect. However in some cases they do not and all gas pressure information is lost for the remainder of the dive. There are no hard and fast rules about which computers and which strobes are likely to be affected. Caution is advised.

For further details about the news, travel or events on these pages please contact Ocean Optics on 020 7930 8408 or e mail optics@oceanoptics.co.uk

Buoyancy Clinics in London

Optics owner Steve Warren has been penning safety features for British diving magazines for some years now. Steve (A former BSAC instructor and Branch Training officer and a PADI MSDT) is particularly concerned with buoyancy training.

Poor buoyancy control has long been identified as a major contributing cause to diving fatalities and accidents. It's also a cause of damage to dive sites. However it is often glossed over during entry level training - all the buoyancy instruction most divers ever receive.

Now Ocean Optics is to offer buoyancy control clinics in London. These will help divers to better understand the many factors that affect both buoyancy and trim. For underwater photographers whose diving skills need to be virtually subliminal in order that they can concentrate on photography near perfect buoyancy control is essential. The clinics will include both informal classroom discussions and pool work where students will be personally coached underwater using our Ocean Technology Systems radiophones.

Optics will use Buoyancy Training Systems Incorporated's Diamond Reef program for the courses. The underwater assault course was developed by NAUI and PADI instructor and commercial diver Peter Wallingford over a decade ago and has received considerable praise from dive safety experts and approval from NOAA. Steve was the first instructor to work with this system in Europe, back in 1992. Along with using the program to train new divers, he also used it to evaluate BCD performance when running equipment testing for Dive International Magazine.

For details call Steve on 0207 930 8408.

Kurt Amsler Workshop



Kurt Amsler is one of very few people in the world to make a living from underwater photography and reportage. The Swiss photographers images and words appear internationally and his features have been translated time and again. Kurt is the author of numerous books including several of the popular Swan Hill dive guides and a major coffee table book on the Maldives.

It's important to understand that a workshop with Kurt is a very serious matter. You'll work your ass off. There is absolutely no point in attending unless you are unwavering in your intention to dramatically improve on the images you've taken before.

The annual English language Kurt Amsler workshop will take place at Les Lecques on the French Riviera in September. The five day course costs £695.00 including shared room in a country guest house with breakfast and evening meal, boat diving, film and processing. Transport is not included.

This is a rare opportunity to learn from a master photographer who holds nothing back. For more details call Andrew Bell on 0207 930 8408.

Ocean Optics Chooses Ocean Technology Radiophones

The radiophones selected by Ocean Optics to teach it's new courses were provided by Ocean Technology Systems.

O.T.S. are a long established American company. Their systems are used by the military, search and rescue teams and by commercial divers.

Voice communication comes into it's own anytime complex tasks have to be accomplished or when sign language becomes inadequate to get the message across. O.T.S. clients include many film makers, including Howard Hall. They've also been used on the Flipper and Bond sets.

Optics will use them to coach clients through using underwater cameras. This will be much more efficient than constantly surfacing to explain a point or technique and faster than using slates. The company has invested in two professional voice activated multi channel units for crew and four receivers for students.

Using receivers will avoid students having to master the use of mouth masks.

O.T.S. units were selected after Steve Warren and Sid Thaker had worked with sports versions in the Red Sea four years ago.

Divequest underwater photography trips

Bonaire

**underwater photography
course with Linda Dunk**

Sunday 17th November - Monday
25th November 2002

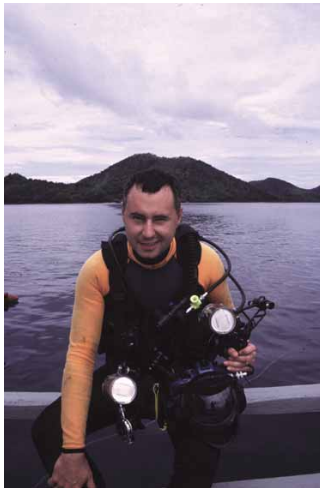


As always, Linda will be on hand to review films when they come back from processing, and will be encouraging participants to 'share your shots' with the group!

Charles Hood

**The Channel Islands of
Southern California**

Saturday 14th September - Sunday
22nd September 2002

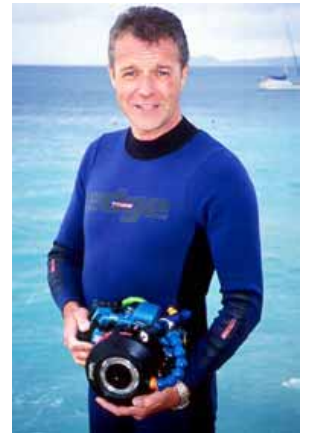


6 days diving including both boat diving around Catalina itself and all day shark diving trips out into the Pacific Ocean.

Martin Edge

**Travels with my camera:
Kungkungan bay**

Friday 27th September - Sunday 6th
October 2002.



Join the Master Craftsman of underwater photography on a trip to the world famous home of weird and wonderful creatures: Kungkungan Bay

Bahamas
Turks & Caicos
Tobago
Bonaire, Venezuela
Little Cayman, Belize
Honduras, Thailand
Sipadan, Mabul
Layang Layang
Derawan & Sangalaki
Bali, Komodo, Wakatobi,
Manado, Kungkungan Bay
Palau, Yap, Truk
Australia's Coral Sea
Papua New Guinea, Solomons
Fiji, Hawaii, Sea of Cortez
Revillagigedo Islands
Cocos Island, The Galapagos
Kelp Forests of California

Plus Underwater Photography Group Trips and Courses with leading photographers:
Martin Edge, Linda Dunk, Malcolm Hey, Charles Hood, Gavin Anderson

DIVEQUEST

Telephone: 01254-826322 or e-mail divers@divequest.co.uk website: www.divequest.co.uk

The Ultimate in Underwater Photography Adventures

ATOL Protected 2937

New products

TWO NEW HOUSINGS FOR DIGITAL BETACAM CAMERAS from Peter Scoones Underwater Visual Systems

Produced for use on BBC's BLUE PLANET these housings represent the latest units from many years of development with broadcast television equipment.

Cameraman Peter Scoones has designed and produced underwater cameras both for the offshore industry and latterly solely for his own use.

These units are now being produced and offered to other users.

Digital Betacam with the Sony DVW790 WS cameras are without doubt the most powerful and versatile production cameras for widescreen television.

As these units are essentially custom it is possible to accommodate special facilities if required.

The Mk 3 housing has controls for on/save/standby, stop/start, zoom, focus, iris var, iris man/auto, gain, detail var, gamma (manual/preset), gamma var, knee (manual/preset/auto), knee var, filter/ND, lens extender, master pedestal, red/blue pedestal, white balance, camera bars/test, manual B/A, and red/blue gain.

The latest versions Mk3 and Mk4 Have slightly increased front barrel diameter to accommodate the new generation of digitally controlled lenses.

For transport the camera assembly comes in two fitted fabric cases. Two inch Closed cell foam padding all round allows housing to travel through normal airline handling facilities



Particularly adaptable for Underwater use, the wide colour range and programmable setup card features of DVW cameras, are fully accessed with the MK.3 housing. Full manual control is available via a built in CCU giving ultimate picture control when used underwater with the high resolution colour viewfinder.



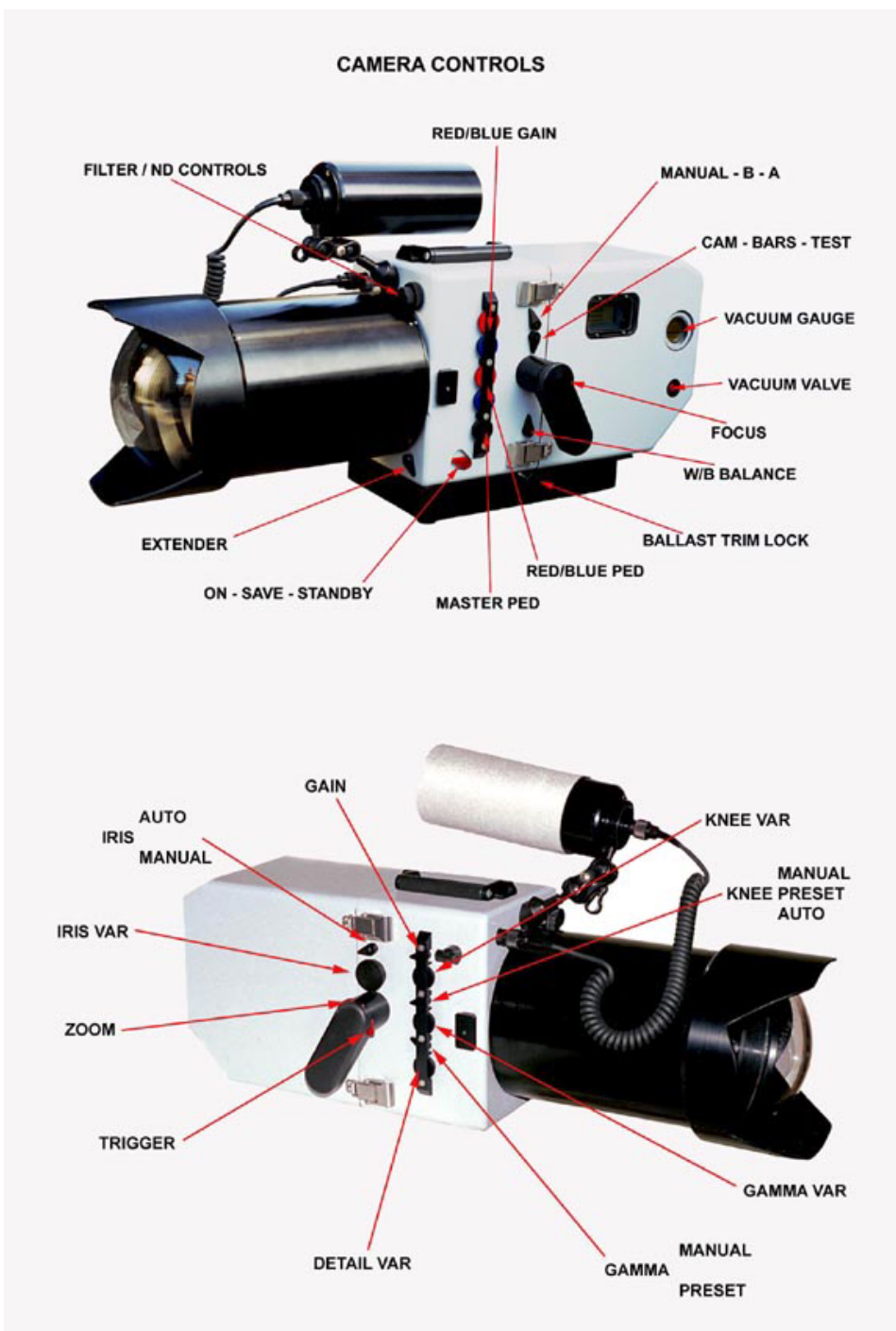
For those who want a no frills approach the Mk.4 housing features all the essential controls, card setup, white balance and is supplied with a monochrome viewfinder.



*This all aluminium housing can be precisely trimmed for neutral buoyancy.
Shot taken in Sipadan.by G. Douwma*



The housing can be vacuumed to test for any possible leaks. This is a simple process which will tell you if the housing is not waterproof before you enter the water. The vacuum pump plugs onto a camera battery and takes around two minutes to get a suitable pressure. A Suunto altimax gauge mounted inside the housing is used to monitor the pressure



The housing is supplied with a ballast trim lock under the housing into which weight can be added and positioned to achieve perfectly neutral buoyancy.

For further details and to discuss your individual requirements, please contact Peter Scoones by e mail

PJScoones@aol.com

Gates Diego Housing For Canon XL1

The Gates Diego housing for the Canon XL1 is what you've been waiting for!

The Diego is machined from a solid block of aluminum for superior strength, and has all manual controls for that famous Gates reliability.

Two ports are available, for use with either the 16X or 3X lens. The Diego utilizes a Canon XL1 EVF, mounted externally in an attached housing for your viewing convenience (*Specify NTSC or PAL*).

The Diego housing for the Canon XL1 comes with Gates unparalleled quality and reliability backed by an exclusive 2-year warranty, unprecedented peace of mind for your investment..

Diego Controls

- Power On/Off • Run/Stop • Zoom • White Balance Mode • Still Photo • White Balance Control
- Manual Focus • Neutral Density Filter
- Iris Control • Color Correction Filter
- Auto/Manual Focus Switch

Housing dimensions

w/o handles

15.75" L X 11" W X 10.5" H

w/ handles

15.75" L X 14" W X 10.5" H

Weight of housing 22 lbs

Weight in water neutral

Depth rated to 250 feet

Viewfinder is a modified XL1 EVF, color



Audio moisture detector alarm
Built in external color correction filter

Gates Underwater Products

www.gateshousings.com

info@gateshousings.com

Sea & Sea MX-5II

The New MX-5II, available in blue and yellow, incorporates all of the quality features built in to the MX-5.

A wide 28mm f/9 focus-free lens for crisp clear images, automatic film advance and rewind, an LCD panel with frame counter, film load confirmation, and low battery indicator, and a clever hinged Sportsfinder that folds down over the lens and doubles as a lens protector.

A strobe mount on the MX-5II allows quick and easy attachment of the new YS-20A. (Available March)

The YS-20A has been engineered exclusively for



the MX-5II. It is ultra light, compact and easy to use. No dials, no decisions, it automatically delivers clear,

colorful pictures. The YS-20A also features an infrared optical triggering system to synchronize the strobe with the camera shutter; there are no cords or cables and therefore no chance of flooding at the flash connection. (Available Mid April).

For further details go to www.seaandsea.com

Nikon Coolpix 5000 earns the Support of the Major Housing Players

Digital cameras have seemingly come from nowhere to make a massive impact on entry level camera sales at Optics.

Replacing the gap in our product range left after we ceased trading in Sea and Sea film cameras last year, it's easy to see the attraction. The user friendliness and versatility of digital systems combined with remarkably keen pricing makes it hard for similarly priced film cameras to compete.

By comparison these are beginning to look increasingly expensive. So the beginner and casual shooter is extremely well catered for with a wide choice of digital systems to choose from.

So far it's been much more difficult for serious underwater photographers to use digital underwater, a reflection of both how

technology dependent the activity is and the lack of equipment being manufactured to meet the needs of the specialist.

However during 2002 that looks set to change with several major European housing manufacturers staking their claim in the emerging digital market. UK, Sealux and Subal have all announced housings for Nikons Coolpix 5000. This will give digital enthusiasts access to small, lightweight aluminium housings. The five megapixel 5000 offers excellent close up capability and accepts several wide angle lenses.

Subal, and we assume, their competitors will produce dome ports to fully extend the benefits of these lenses to underwater photographers. Additionally these housings all allow use of Nikonos

fit strobes.

This last point is a breakthrough. Until now off camera lighting has been difficult to fit satisfactorily to most Digital systems. Many cameras do not have flash connectors for external strobes and even fewer housings provide them. Those that do often require that the strobe is fired manually - most underwater strobes are Nikon compatible and won't work automatically with non Nikon cameras. The housings we've seen proposed for the 5000 all use standard Nikonos V connectors and will allow a degree of automatic flash control with most modern strobes.

Ocean Optics has already placed orders for the Subal 5000 housing. It should be available in limited quantities shortly.

**Toys
will
soon
get**



serious

The Subal housing for the
Nikon Coolpix 5000 is coming soon.
Underwater photography will turn a corner.

El Hierro

The Quiet Canary

by John Collins.

Mention to people today that you have just been to El Hierro and most will immediately reply 'where's that?'. A few hundred years ago, however, any traveller worth his salt would certainly have known of the smallest Canary Island. From ancient times, when Ptolemy declared El Hierro to be the 'edge of the world', it was considered to be the last point on the 'flat' world, right up to the middle ages. The zero meridian of Longitude was established at Punta Ochilla on the western tip of the island and retained this title right up to the mid-nineteenth century. The Greenwich of it's day, as it were. Since then, however, this beautiful island has slipped quietly into obscurity.

It has even managed to escape the mass development of its neighbours, Tenerife, Lanzarote and Gran Canaria. The mountainous terrain and lack of big beaches has proved to be it's saviour. The result is an unspoilt haven on land and sea. A UNESCO biosphere reserve now, its rugged beauty has been recognised and recently protected. Approaching the island after the 4 hour ferry trip from Tenerife, you would not think so. From afar, it appears little more than a rocky, windswept island in the middle of the Atlantic.

Driving away from the ferryport however, closer inspection reveals a unique landscape. Spectacular cliffs falling over 1200 meters and the distorted shapes of lava formations contrast with the green hills of the central plateau. Here, 1500m above sea level, the land is fertile and the small holdings are reminiscent of the west of Ireland - complete with stone walls.



The coasts are rugged and often pounded by strong waves on the north, the direction of the prevailing winds. The south coast on the other hand, in the Mar de las Calmas, or Sea of Calms, offers unrivalled conditions for diving.

For this reason, the village of La Restinga on the southernmost tip of the island tends to be where most diving is based. The sea area here has been a marine reserve since 1996. If you have dived before in Tenerife or Lanzarote, you will find El Hierro a very pleasant surprise.

First Impressions

I had travelled to El Hierro at short notice, which was well timed as I had just taken delivery of an N10 housing for the F100. Here was an excellent opportunity to give it a run and soak up some winter sunshine to boot.

Despite being virtually



unknown in the diving travel scene, El Hierro is a firmly established favourite among Spanish divers, their best kept secret.

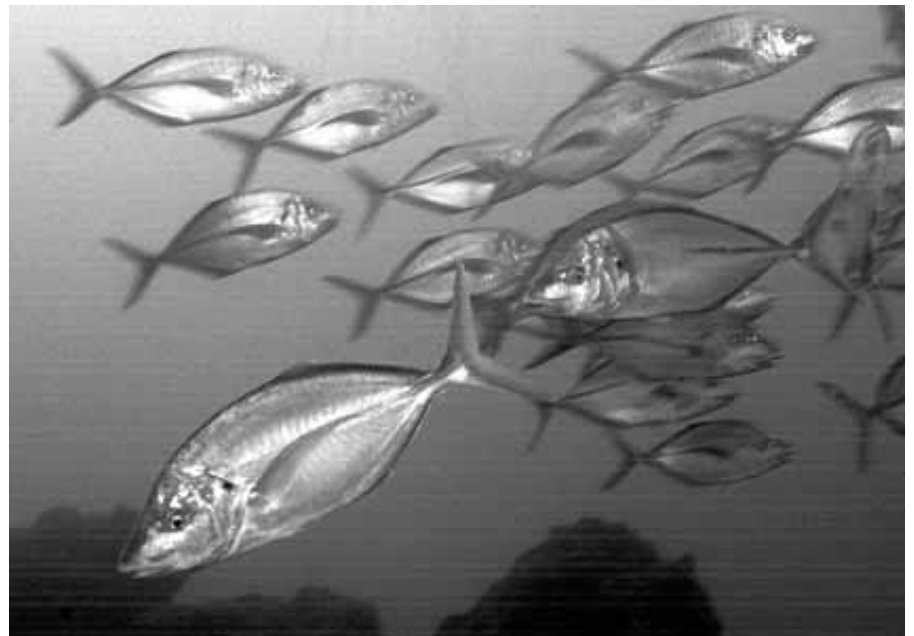
It is the site for the annual underwater photographic championships

www.openfotosub.com - a great week in October by all accounts, open to all.

In the water, the first thing you notice is that the water here is a good 2 degrees warmer than say, Lanzarote, at about 23 degrees centigrade (in November). This gives a very 'cosmopolitan' mix of



marine life. There are some fish that are familiar from diving at home, others that you would recognise from the Mediterranean and some tropical critters that you would associate with coral diving. Add some dramatic rock formations, an intense blue water, typically with 30 metre visibility and you have a recipe for some nice diving. There are about 15 dive sites within a 10 minute RIB journey from the small harbour of La Restinga - some are a mere 3 minutes away. Being volcanic islands rising from great ocean depths, there is no continental shelf around these islands and the water within a half of a mile from shore plunges to thousands of metres deep. This means that seeing pelagic species - the big boys - is a real possibility, particularly on the sites further from shore. This diving is adventurous with sheer walls dropping to great depth and strong currents and so recommended for experienced and fit divers. Inshore, the diving is very pleasant, 10 - 30 metre rocky bottoms and very easy going. The rocks themselves are covered in plant life and sponges, giving them a grassy green colour and it is this aspect alone that differentiates El Hierro from coral diving. With so much sunshine a clear water however, the algae grow really well and gives rise to the large range of species to be seen.



El Bajon

This is the classic offshore site on the southern end of the island. Just half a mile from La Restinga harbour, this pinnacle rises from great depth to just 9m from the surface. There are two permanent moorings set by local dive centres and once the boat is tied up the current is gauged by observing for a few minutes. The currents are oceanic and affected by wind and other variables and so not predictable like tidal streams. Almost always, there will be some water movement, so listening to the dive brief and following the plan is

a must. You might think that when the current is strong, it is not worth diving but it is the current that brings the beasties. On a circuit of El Bajon, you are likely to see large schools of amberjack, tuna and bonito. Occasionally, turtles and manta are seen here.

The trick is to keep an eye on the blue, which is not always easy there is so much happening on the reef itself. Particularly decompressing, the top of the rock is a delight with small fish everywhere, from brightly coloured parrotfish to the strange trumpetfish, more familiar in coral waters. El Bajon is worth at least two dives.



El Archo

The Arch is a deep dive to 40m. The mooring is in much shallower water (as is the case with many sites), so there is a bit of a swim to get to it.

Pacing your finning will give you better air endurance, so it is worth taking your time rather than racing down to depth. The arch itself is impressive, a stark shape contrasting with the blue background. It is covered in black coral - which appears green underwater - and is generally home to a school of gully jacks. These are large silver fish that just hang out in the shadow of the rock as if sheltering from the sun. The swim back up the reef is very pleasant, finishing the dive in about 6 - 8 metres.

Baja Bajarones

These are two underwater 'mountains' as the guides call them, a bit like coral bommies in the Red Sea. After a swim from the mooring, you reach 25m and the two pinnacles are easily seen. There is a lot of fish action here, and plenty of moray in their lairs, enjoying some cleaning from small lady scarlet shrimp.

La Restinga

The inshore waters near the harbour are remarkably good, given where they are. This is largely

due to the fact that some 750 hectares here are a marine reserve. Of the several sites Punta Restinga is one the most enjoyable. These sites are generally the second dive of the day, so not as deep and certainly not as prone to current. You will commonly see grouper from a modest 30cm size to huge sheep size ones. These are very curious and will come to investigate divers. They seem particularly interested in their reflection in the glass dome of camera housings, coming right in until the bounce back ! Other exotic fish more characteristic of the tropics that can be seen here are unicorn fish and porcupine fish, the latter, of course known for blowing up into a ball in defence. It is seriously bad form to try to harrass these fish into doing this. Night diving is possible from the harbour, best done from the last set of steps on the pier. It is a plain sandy bottom but home to lots of critters you are unlikely to see by day.

There are large stingrays, which can give you a bit of spook in the dark, as well as octopus and small sharpnose pufferfish. Watch out for the extra charge for night diving however, as it can be excessive and lazy guides will simply bring you around the boat moorings.

El Dessierto

Like many of the simple names on the dive sites, The Dessert is aptly named. This the generally the furthest site dived from La Restinga taking about 15 - 20 minutes in the RIB. On hearing the description of this site, I opted to photograph it in black and white, using Agfa Scala film. This produced images very like what this site felt like. You descend a normal rocky bottom to begin with but this soon gives way to a bizzare black sand.

At about 35 metres, the sand lightens again and large colony of garden eels can be seen swaying gently in the food bringing current. Turning to swim back along the rocky reef, you are greeted by a large, very curious grouper who is happy to hang around as long as you are. Along the sand, stingrays and large butterfly rays will occasionally be seen resting, while back in the shallows snake eels were seen by many divers as well as lots of morays.

Great, two dive site.

Further afield

The best of the sites around La Restinga can be dived in three days. If the sea is calm, a real adventure is to go west to Punta Ochilla (the lighthouse) and further on to Los Roques de Solmar on the Northwest coast.

These are a series of rocky sea stacks and sumerged rocks that attract pelagic animals. Here, you can see Hammerhead and other sharks, turtles, tuna and manta rays. This site has been described as 'THE' best in Europe.

F100 and Photography Notes

And how did the F100 fare, I hear you ask? Marvellously. Having used the F100 on land for almost 18 months, I was comfortable with its general features. Underwater, it is a joy to use. Focus wise, I now never fit a focus gear. The camera can focus more quickly and positively than I can, despite many years manually focussing F8011s and F901s with all sorts of lenses. With a choice of 5 focus areas, you do not tend to 'bullseye' the focussing. In low light, for example the cave with the gully jacks, I could barely see the fish. Raise the camera, touch the AF button and zip - focussed. I found this aspect of the camera incredible compared to the F90X.

I also found the matrix metering excellent. Some of the shallow sites, in bright sunshine, are very contrasty but frames exposed using matrix were as good as careful spotmetering. One problem I did have was with flare in the dome. I use an 18mm now instead of a 16mm fisheye for extreme wide angle but had a lot of flare using the fisheye dome. So, smaller domes are probably preferable. Also, some of the sites lend themselves to narrower wide angle.

I had some very pleasing results using a favourite land lens, the 35mm F2.

Film wise, 100 speed is perfect for most sites, though I used Multispeed rated at 400 for some of the deeper sites, like the arch.

A day or two exploring the island to photograph topside would not go amiss also, it is a much more varied landscape than the other Canary islands.

Essential Reading

'Diving in Canaries' by Sergio Hanquet is an indispensable guide to diving El Hierro, as well as the other islands. In many years of dive travel, I don't believe I have seen a better dive guide book anywhere. The photography is superb, there are accurate and comprehensive details of all the sites and detailed descriptions of all the marine life you are likely to encounter. Highly recommended.

Check www.sergiohanquet.com

for details, the book is easily picked up at a dive centre on Tenerife or El Hierro.

John Collins

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Co. Cork

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www.kinsalepharmacy.com



Travel Info

Getting to El Hierro requires a little planning but is not difficult. A holiday charter flight to Tenerife is easily arranged through a travel agent here. The ferry from Los Christianos is operated by Trans Mediteraneana and operates several times weekly. Car hire can be arranged locally. There are many apartments to rent in La Restinga, the dive centres are happy to organise this. Eating out is very good and cheap, as is the local beer 'Dorada'.

El Hierro has an excellent web site with all contact details at www.el-hierro.org.

I travelled with Shane Gray of Scubadive West, one of Ireland's best dive centres. He has been organising escorted trips since October last and these are excellent, particularly for groups.

In typical Scubadive West style, everything is laid on and extremely well planned.

Details at www.shanegray.com

As the island is not as tourist based as the other Canaries, a little Spanish is essential.

Secret Bay

By Demelza & Will Postlethwaite

Muck dives, black sand or 'critter hunts' have always proved to be a favourite among underwater photographers, nudibranch freaks and scientists on the look out for something new to bear their name. Indeed locations which can provide for these enthusiasts and professionals have reached almost devotional status. The recent publication of lavish coffee table books depicting the stunning and freakish marine inhabitants of these incongruous dive sites is further testament to their popularity.

Now, I've never been known to keep a secret for long and a bay known by just a handful of photographers is certainly a secret worth sharing. If I also let slip that diving here will cost you a mere sliver of the wad demanded by its infamous native counterpart, it should be enough to get your trigger finger twitching.

Located on the arid western tip of the spirituous island of Bali, Secret Bay follows the established pattern for muck diving venues in its appearance from the surface. Far from being a tropical idyll the bay is positioned close to a ferry terminus and the slightly grotty shore supports fiddler crabs, a scattering of litter, half a dozen shabby fishing vessels and a small dive resort, at that time host to a single Japanese photographer and his assistant.

Leaping eagerly from our comfortable transport we could see that the tide had some way to come in before our guide, Romon, would be satisfied of the best conditions for diving. Our attempt at a cheery, get to know your fellow diver type 'Good morning', in either English or Japanese to the resorts guest was met with purposeful ignorance so we were whisked off for a quick tour of the local attractions.



Secret Bay follows the established pattern for muck diving venues in its appearance from the surface.

Previous to this trip we had visited similar sites in Papua New Guinea, Southern Sulawesi and the Lembeh Strait so it was with accustomed eyes and high expectations that we waded in to the water.

Within five minutes Will's 60 mm lens was occupied with a Flying Gurnard while I struggled with depth of field on the 105 mm and an Ornate ghost pipe fish.

Nudibranchs peppered the black sand, porcupine fish peered dolefully from the rims of discarded truck tyres and isolated anemones housed shrimp and angry damsel fish. The dive was typically shallow and therefore film was the primary limiting factor to our dive time. Having earlier made the impudent comment 'If I see Frog fish and Seahorses then I will be happy' I was ruthlessly reminded of it after the next dive, having spent 36 exposures on nothing but Frog fish and Sea horses!

Secret Bay is sometimes referred to as Gilimanuk which is the location for the terminal despatching and receiving ferries from Java. A large horseshoe shape, it is dotted with mangrove islands providing a huge area to explore.

During our shore diving forays



A seahorse fills the frame with a 105mm macro lens

we simply decided on an entry point and a rough direction of travel and after a couple of days our sightings list included Ambon scorpion fish, dragonets, pegasus sea moths and some very large brown sea snakes. Many of the nudibranchs were simply unidentifiable, purple and orange lilliputian sized snails inched along decaying palm leaves and seahorses cruised between the sandy cones made by snake eels.

Our fellow diver from the



Marine wildlife ignores man's rubbish



A weird dragonet



A snake anemone on the sandy seabed

Frogfish are in plentiful supply



resort spent six hours in the water protectively guarding the lair of a mimic octopus.

Not far from Secret Bay lies the island of Menjangan. This is deservedly one of Bali's most popular dive sites and the mainland is thus able to support a handful of boutique hotels. The individual thatched cottages, kingsize bed, voluminous mosquito nets, horizon swimming pool, stunning open air bathrooms and lush gardens created a tranquil tropical haven for weary divers and non divers alike.

Photographically our time here was very productive, equalling that of more well known areas. Annabel of Aquamarine Diving in Bali is a specialist in dealing with the demands of underwater photographers and will produce a tailor made trips for individuals with startling professionalism and refreshingly realistic prices.

For those of us unable to afford the likes of Lembeh or those on the look out for new mecca of muck diving, Secret Bay should be on the top of your list .

**Demelza & Will
Postlethwaite**

Environmentally friendly underwater photography

by Alexander Mustard



As I write this I am on a plane heading across the Atlantic to warmer climes. And I am green with envy. The reason is that I have just put down the latest issue of Ocean Realm with a portfolio of their best images from the last sixteen years. I would love to have shots of that quality in my portfolio. I would do anything! But is this a good attitude? From an environmental standpoint, how far should I go to get a shot?

Underwater photographers have a pretty environmentally unfriendly reputation in the diving world when it comes to looking after the marine environment. Ask any diver and I am sure they will have stories of the photographer on their recent dive trip who smashed

corals and terrorized the fish. We all know it is perfectly possible to take wonderful underwater pictures without harming the environment (the Ocean Realm shots are great examples), but our bad reputation is beginning to stick. A recent paper in the scientific journal Biological Conservation suggested that the reefs of the country I am flying to, would be better protected by “banning access to users thought to do the most damage - novices and photographers”. One of the authors of this paper works for the Department of the Environment, so it is not far fetched to suggest that such recommendations could become law. Unless we do something we could be banned from our favourite reefs in years to come.

Moving subjects.

The black coral crab lives, as it names suggests, in black coral. However this one has been moved and photographed on a brown sponge. Is this acceptable? Nikon F100 + 105mm lens. 2 x YS120. f16 @ 1/250th. Velvia 50.

What I hope to achieve with this article is to raise awareness of this issue, that most of the time we would rather ignore. I do not intend to lay down the law; regulations are of little use if there is no way and nobody to enforce them. What I hope is that we all consider, that bit more frequently, what is acceptable behaviour. Our most effective policemen are ourselves. Who else



Fish feeding.

Fish feeding would go on without photographers, but should we take photos on fish feeds and bait animals for photography?

Nikonos V + 15mm. 1 x YS120. f6.7 @ 1/60th. Fuji Sensia 100.

is with us on every dive?

My opinion is that this problem is two fold. First, as a group, photographers do damage the environment. We can't deny it, all divers do from time to time. And while I know many photographers who always put the environment first, our collective reputation has come from somewhere. Second, I also believe that there is a problem with perception: the diving world tends to tar all photographers with the same brush. Sometimes getting a camera out on a dive-boat elicits the dirty looks that you might expect if you were about to take a pet crown of thorns starfish down with you!

Physical damage to the environment, such as breaking and killing marine life, is inexcusable. In almost all cases no one sets out to damage the reef, but from time to time our desire to get the shot exceeds our diving ability. I am not just talking about a relatively new diver, who has not yet mastered the finer points of buoyancy control, this is just as true for the seasoned



Animal arrangements. This unique "discovery" was pointed out to me on one dive. Unusual behaviour or underwater gardening?

Nikon F100 + 28-70mm lens, +2 dioptre, flat port. 2 x YS120. f11 @ 1/250th. Elitechrome 100 Extracolour.

Legless.

This Dendronephthya or candy crab has lost a leg. Is this natural or the result of too much persuasion by photographers and other divers keen to see it? It is a cryptic animal relying on camouflage for defence - if it is found it is eaten and would be unlikely to lose a leg to a predator. Nikon F100 + 105mm lens, +2 dioptre. 2 x YS120. f16 @ 1/250th. Velvia 50.

photographer pushing to get that much closer or rushing in to capture that elusive creature. The best solution is to make thinking about the environment part of our decision making process both before going in to take the shot and while shooting. So as well as considering the exposure and composition of a shot, we should check that we are doing damage with our flash arms, contents gauges, fin tips etc, and leave well alone subjects that are showing signs of stress. And when we do digress, we need to hold up our hands and admit it. Letting the other divers on the boat know that we weren't damaging the reef intentionally is important. If we say nothing divers will conclude we do that on every dive.

A greyer area comes in subject manipulation, which includes baiting and feeding subjects, enticing and corralling animals and environmental rearrangement. To some extent views on these subjects will always remain personal. There are an increasing number of codes out there that not only provide very useful sets of guidelines, but also help to address the perception that photographers don't care. In the UK the British Society of Underwater Photographers are working with the Marine Conservation Society to draw up a code of conduct.

The Environmentally Aware Photographic Image Competition promotes UWP that is non-stressful for marine life, and states that it will exclude images with divers damaging the reef or with animals being fed, showing signs of stress, in unnatural locations or being touched. This must be the way forward.

To add to the problem, it seems that these days we don't even have to do the dirty work ourselves. On a trip to South East Asia, I found dive guides so eager to please that they would move animals around for me. On occasion I would come round a corner of the reef to find all sorts of strange animal configurations; at times coral gardens were rearranged to such an extent I thought I was diving with the BBC's Groundforce. The behaviour of our guides is completely our responsibility; it is the client who must define what is acceptable.

Finally, I think that it is important to get some good PR! Definitely part of the problem is a lack of understanding on the part of divers of what photographers are up to. Taking time to add a sentence to an article, a talk or an after dive chat in the bar will provide the facts to correct misconceptions. There are



bad feelings out there, which as photographers, often travelling with other photographers, we are not always exposed to.

I would like to conclude by adding some perspective. Of course, underwater photography is not all bad. Most of the time great pictures are taken without harming anything and underwater images have given the population at large a better understanding of why the marine environment should be conserved. The benefit of pictures as posters for conservation is incalculable. Coral reefs are not about to be wiped out by the actions of underwater photographers (although there are plenty of other threats lining up to do the job). That said, as the documenters of this fascinating and beautiful realm we should be doing and be seen to be doing our utmost to conserve it.

Further reading

Bonaire Marine Park photography guidelines

<http://www.bmp.org/html/>

underwater_photography___video.html

EPIC Photography Competition

<http://www.epicphotocontest.org/>

rules_regulations.htm

BSoUP and MCS Code

<http://www.bsoup.org/code.html>

Alexander Mustard

HMS Royal Oak video



“a workmanlike, professional
production, and worth viewing”

John Bantin, Diver magazine

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 tragedy.

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**

Skin Diver magazine in a joint venture with BigAnimals.com, is offering a unique diving & photography expedition - **Antarctica!**

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Lembeh Strait: Paradise in Peril

by Constantinos Petrinos

The Lembeh Strait is a unique diving environment located in North Sulawesi, Indonesia. Most divers, photographers in particular, are aware of the Lembeh Strait for its unique biodiversity. Indeed for most divers it is a dream dive destination.

In the year 2000, I spent five months in the Lembeh Strait working for my book "Realm of the Pygmy Seahorse". Apart from fame, glory and the huge profits associated with uw photography, my hope was that this book would become a tool to convince local authorities to give Marine Park Status to the Lembeh Strait. It seems that I have failed along with so many photographers and videographers that praise the biodiversity of the region in their work.

Mark Ecenbarger, owner of Kungkungan Bay Resort (the famous resort of the Strait) just informed me that already there has been construction of four cold fish storage companies and two ship yards in the southern end of the Strait.

In addition the agreement with the local authorities that the Northern end of the Lembeh Strait would be reserved for tourism seems that it will be violated. The plans for the immediate future are to build a 2000 ton cold storage and slipways in the Northern end of the Strait (in the area of the famous dive site called "Hairball"). These facilities will handle 1,000 fishing boats per year thus destroying some of the best dive sites in the Strait.

The resort management has not been able to see any environmental reports that assess the damage or not to the area.

Kungkungan Bay Resort has been operating in the Lembeh Strait for 10 years in harmony with the local community. The Resort is responsible for making Lembeh Strait known and for working hard towards its preservation. I have been asked



Kungkungan Bay Resort has been operating in the Lembeh Strait for 10 years in harmony with the local community.



by the management to publicize this imminent threat to the environment of the Lembeh Strait. The intention is to let divers know that the Strait is in serious trouble.

You can help as individual divers by making this known.

I will be visiting the Lembeh Strait during January, February and March 2002 and I will let you know of any developments through UwP magazine.

Constantinos Petrinos



German magazine TAUCHEN used one of Constantinos's pictures for the November 2001 cover of the magazine. The TAUCHEN subscribers/readers voted his image as the best TAUCHEN cover shot for 2001.

The shot was taken with a SUBAL Nikon F4 and 60mm.

Manado Location Report



by Mark Webster

As underwater photographers we are always seeking new locations to feed our obsession and it seems that never a day goes by without some sage revealing yet another perfect location with endless subjects just waiting for you and your camera. Whilst enduring favourites like the Red Sea and Caribbean still attract us and provide plenty of photo opportunities, a new 'Holy Grail' has emerged in the last couple of years, that of the vast island complex of Indonesia. The attractions of Indonesia have been obvious for quite some time and has been a very popular destination with antipodean divers and more adventurous Europeans and Americans. However it is only relatively recently that UK photographers have begun to travel to the area regularly, but with such a large number of destinations to choose from in the archipelago it is sometimes difficult to make a choice which will give you the desired facilities and photo opportunities. With this in mind I thought it may be useful to pass on some practical guidelines to an area which is emerging as almost ideal in terms of accessibility, diving variety and a splendid selection of subjects to keep even the most ambitious underwater photographer happy.

The location is the northern end of the island of Sulawesi and, although this area is not geared up as a 'tourist destination' in the classic sense, the area around the port town of Manado provides all that a diver will need and some interesting diversions for non divers as well. Travel to Manado is very simple with the most popular route being via Singapore and then onward on a Silk Air connection to the international airport close to the town. There are also connections available via Bali and Jakarta (Silk Air and Garuda) which can make travel arrangements more flexible and enable you to take advantage of reduced air fares. The only drawback for we photographers is the pitiful standard baggage



The Tasik Ria Resort has perhaps the best equipped dive boats for the serious photographer.

Large sea fans reach out into the current on the walls. There are also host to small gobies, crabs and long nosed hawk fish. Nikon F90X, 16mm fish eye, Subal, Isotecnic 33TTL & YS30, Ektachrome EBX, f11 @ 60th.



allowance of 20kg which is barely enough for your diving equipment let alone the essential photographic items. This allowance may be higher if you are flying in from the east (i.e. from the USA or Australia) but it is wise to check the allowance for both flight legs when you book. Some airlines (e.g. Singapore Airlines) do offer an extra 10kg for sports equipment at a reasonable fee but in general, particularly in this prevailing climate of higher security which limits hand baggage, you need to be prepared to bite the bullet and pay for excess weight. Having done this you can check

your bags all the way through to Manado, although I always prefer to confirm that they have been loaded when I check in for the connecting flights!

The secret to the attraction of Manado is the proximity of two totally contrasting marine ecosystems, that of the Bunaken Marine Park and the Lembeh Straits. The Bunaken Marine Park is located on the west coast of the peninsula and provides spectacular classic coral reef and wall diving with a variety of rare and unusual creatures thrown in. The Lembeh Straits are on the east side of the



Traditional local boats are used to ferry divers in the Lembeh Straits. All the beaches feature the same black volcanic sand.



Commensal shrimps are difficult to spot at other locations. Here almost every sea whip has a shrimp or goby at home. Nikon F90X, 105mm, Subal, Inon quad flash, Velvia f16 @ 125th.

peninsula, only 40km away, and offer the alternative of unique muck diving conditions in which a staggering array of rare marine denizens thrive and are reliably found on every dive. So you are literally spoilt for choice and you can choose to split your time between both locations or even change your plans during your stay if you find the lure of one is stronger than the other.

This part of Indonesia is within an area of volcanic activity famously known as the 'Ring of

Fire', which includes big names like Krakatoa which erupted massively in 1883 and more recently Mt. Agung in Bali which did significant damage in 1963. There are many extinct, sleeping and active volcanoes in the region and this has produced some of the spectacular underwater scenery in the Bunaken Marine Park. The proximity of the equator, large tidal range and the intermingling of warm and cool currents propagates high levels of nutrients in the water column which in turn supports the

diverse range of marine life for which this area is now renowned for. The large tidal range can mean that strong currents will prevail on exposed dive sites which is good for big fish activity but not if you want to take macro photographs! So you need to choose a good dive operator who understands the local tidal conditions and the needs of photographers to ensure that you have slack water on the best sites when you need it. Due to the arrangement of the islands in Bunaken there is generally somewhere sheltered from the tide although the currents can do strange things on reef promontory's and even change with depth. Strong currents are also experienced in the Lembeh Straits, but are a little more predictable here and there are sites which are accessible at all states of the tide. Although the currents may occasionally pose a challenge to photography they are of course the reason that the area supports such diverse life forms and so should really be appreciated! However, wherever you choose to dive I would recommend that you carry a "marker sausage" or extendable flag and an air horn on your BC direct feed in case you get carried away with your dive too literally.

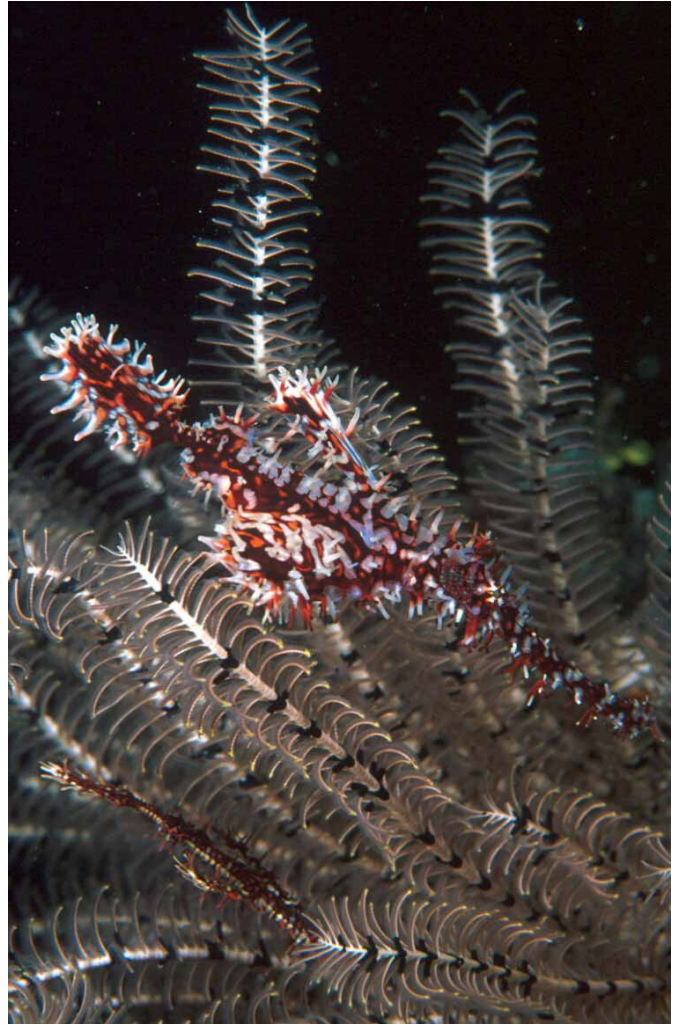
There are a variety of diving resorts both north and south of Manado on the west coast which offer varying degrees of comfort. There are also some dive operators based on Bunaken Island which offer a base closer to the diving but without sophisticated facilities. Choosing Bunaken Island as a base would suit those only interested in diving in the marine park and surrounding islands. Most diving centres use local style boats which are stable diving platforms but lack the facilities that you may have come to expect in the Red Sea for example. The one current exception are the boats operated by the Eco Divers, based at the Tasik Ria Resort, which follow the design of a typical Egyptian day boat (constructed in glass fibre) and are



Soft corals are found in vivid colours and will match those found in the Red Sea. Nikon F90X, 16mm fish eye, Subal, Isotecnic 33TTL & YS30, Ektachrome EBX, f11 @ 60th.

very spacious and comfortable. This may be a consideration if you are spending a day at sea and need space for camera preparation. There are some live aboards which operate seasonally but their itineraries generally take them farther afield from this area.

The wall dives in Bunaken have all the features you would expect on a healthy coral reef. The shallow wall tops are dominated by hard corals which are in superb condition in many places, whilst the walls are decorated with large sponges, graceful sea fans, numerous sea whips and vividly coloured soft corals. Intermingled with this are more hard corals and the whole spectacle is populated by exotic Indo Pacific reef fish from tiny gobies on sea whips to herds of grazing bumphead parrot fish in the shallows. The challenge for the photographer is of course not only to capture the obvious species but also those which rely on camouflage for predatory purposes or protection. Elusive creatures like robust and ornate ghost pipe fish, leaf scorpion fish, stone fish and numerous others can be found by chance but a better bet is to use the skills of a local dive guide who have incredibly sharp eyes and



Every feather star hides a secret. Some are tiny like squat lobsters and shrimps but even the larger tenants, like this harlequin ghost pipe fish, are difficult to spot. Nikon F90X, 105mm, Subal, Inon quad flash, Velvia f16 @ 125th.

The hairy appearance of this crab links by name it to another indigenous land species, the orang-utan. Nikon F90X, 105mm, Subal, Inon quad flash, Velvia f16 @ 125th.



are simply invaluable to your quest. If your taste is for bigger blue water cruisers then there is a chance to see all the usual suspects. Schools of barracuda, trevally jacks, turtles, several species of sharks and apparently

The pigmy seahorse has become a holy grail to photographers visiting the area. These are tiny subjects which need at least 2:1 magnification. Nikon F90X, 105mm + 2X converter, Subal, Inon quad flash, Velvia f16 @125th.

the occasional whale can all appear from the blue or from the depths off the walls.

Closer to the coast off Manado there are numerous shallow water reefs which offer coral formations in conditions which range from very good to rubble either as a result of wave action or from past blast fishing techniques which are now banned. The visibility on the inshore reefs is variable but is rarely as bad as say a UK dive and is more than adequate for tracking down your quarry and close up photography. The attraction of these reefs is the variety of subjects which include those ghost pipe fish again, blue and black ribbon eels, crab blennies, prawn gobies and their partners, mantis shrimps, snake eels and frog fish in various hues. You will also find that prized macro subject, the pigmy sea horse, which will definitely need the help of a guide to find and will astound you when you see just how small and well camouflaged they are. I made a long decompression dive on a reef close to the Tasik Ria Resort where a large sea fan sports at least five of the creatures. I was only able to see and photograph two of them and that was challenge enough as they will only partially fill a frame at 2:1! These coastal reefs are also excellent for night diving when a whole new cast of characters will emerge. Twin spot and dwarf lion fish, juvenile cuttle fish and squid, crabs and squat lobsters in soft and hard corals, leaf scorpion fish and a whole cast of sleeping fish will soon consume your film.

Your first impression of the Lembah Straits may be one of disappointment as you descend in often gloomy vis onto a dark volcanic sand or rubble bottom



which might appear lifeless. However, all is not what it seems and you will soon realise that there is amazing variety here, but it all very well camouflaged. This area has of course received a boost from the release of a book by Constantinos Petrinos, the 'Realm of the Pigmy Seahorse'. Whilst these awkward little devils can also be found here this symbol represents only a fraction of the macro treasures you will find. Once again, you will need the help of an experienced guide to make sure you get the best from your dives. After several weeks here you may well begin to spot the more unusual species for yourself, but most of us cannot afford that luxury. You will find the guides are both willing and enthusiastic in their quest and you are certain to be faced with mores subjects than available film - two camera systems are not a luxury

here!

Each dive site boasts a particular species speciality, although they all have an amazing variety. Some are good for nudibranchs where you will find upwards of twenty five species in a single dive. Others are havens for frog fish, ghost pipe fish, cockatoo wasp fish, Inimicus scorpion fish, snake eels and numerous other relatively 'common' species. Certain areas of the shore line plunge straight into the water forming shallow walls which are overhung by trees and vegetation. Here you will find a riot of colour as invertebrates and sponges fight for space on the wall. Deeper water species like sea fans are also able to thrive here, due to the lower light levels, and you will discover a selection of gobies, cling fish and crustaceans who make their home on these corals. The walls bottom



The flamboyant cuttle fish looks dull until you pass your hand over it - then colours will ripple across its surface. Nikon F90X, 105mm, Subal, Inon quad flash, Velvia f16 @125th.

out on rubble reefs with outcrops of coral which are peppered with feather stars which, if not host ghost pipe fish, are home to tiny crinoid shrimps and squat lobsters. These take a great deal of patience to find and even more to photograph at high magnification. Much has been written about Lembeh and I have found that little of it has been

exaggerated - if you enjoy macro photography then you will be overwhelmed by the choice of subjects.

So Manado has many attractions for both the serious photographer and those who simply enjoy spectacular reef diving. If that is not enough then there are jungle trips, volcanoes, waterfalls, white

water rafting or simply island hopping to enjoy. This contrasting experience costs little more than a quality live aboard week in the Red Sea and promises a cornucopia of photographic subjects which are considered rare at other locations.

Mark Webster
www.photec.co.uk

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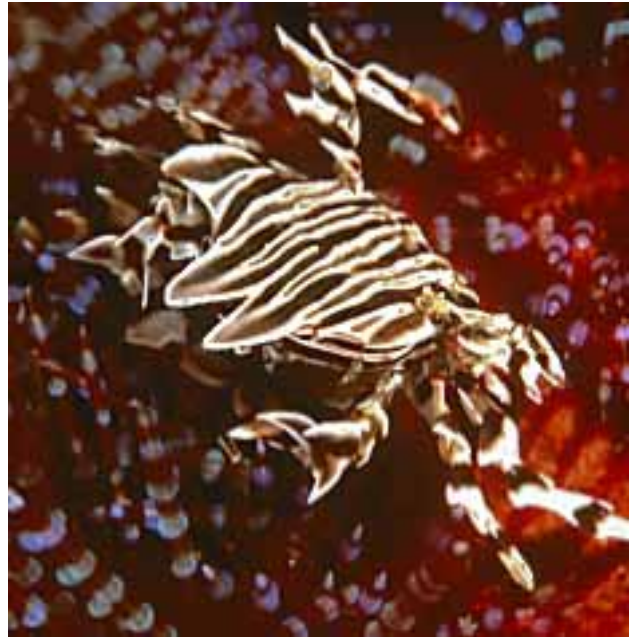
Ocean Optics

Hitchhikers on the Reef

by Steve Norwich

While the technical side of photography is necessary for good images, it is hardly sufficient, for without subjects to photograph, there will be no interesting images created. Searching for photographic subjects is aided by understanding relationships within the marine environment. This includes knowing the habitat of marine animals, knowing what they eat, and knowing about relationships that occur with other animals.

One of these types of relationship is commensalism, wherein one partner lives in close association with another and benefits from the relationship while providing neither benefit nor harm to the partner, and another is mutualism wherein both partners benefit (as opposed to parasitism wherein one partner benefits while the other partner is eventually harmed). This article talks about one particular type of commensalism and mutualism, with several examples, wherein one partner receives shelter and transportation from its partner



Urchin Crab Zebrida adamsii
Urchin Crab on fire urchin

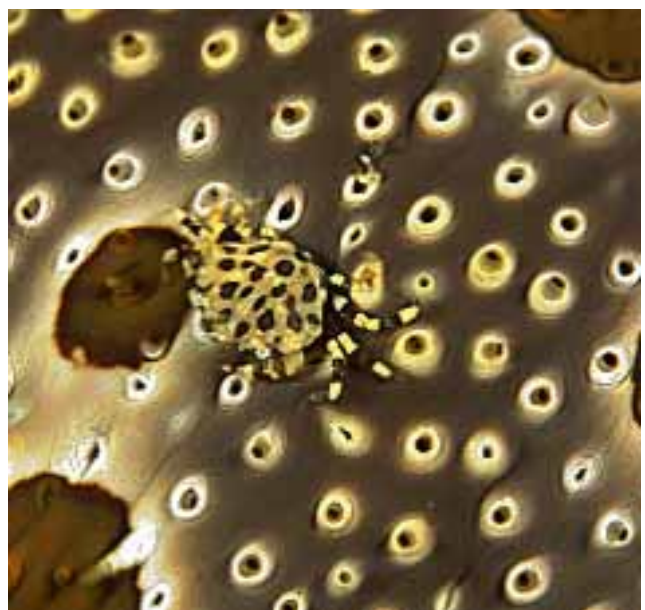
The white and dark brown striped Urchin crab is another guest of the fire urchin often occurring on the same animal as the Coleman Shrimp.

Whereas the Coleman Shrimp only lives on the fire urchin, Urchin crabs live in association with a variety of urchins. The last segment of its leg forms a hook to hold onto the spines of the sea urchin. It can be found singly or in pairs



Hitchhikers on the Fire Urchin, Asthenosoma varium, an example of commensalism
Periclimenes colemani (family Palaemonidae) or Coleman Shrimp

Coleman shrimp are normally found in pairs on the toxic sea urchin, *Asthenosoma varium*, also called a fire urchin, with the female being the larger of the two. Coleman shrimp move amongst the poisonous spines and pedicellaria without incurring harm but they usually clear an area of these obstructions where they perch. They make beautiful photographic subjects and are easy to photograph as they have every confidence that they are secure on their poisonous perch and do not move about as other shrimp often do.



Swimmer crab on urchin Actinopyga

Often found on the sea cucumber *Actinopyga*, the swimmer crab is commensally associated receiving transportation and protection. It is often found with the Emperor Shrimp discussed below. While the swimmer crab benefits from the relationship, the sea cucumber does not.



Emperor Shrimp on Actinopyga

Emperor shrimp hitch rides on various partners; I have seen them on sea cucumbers of various species and nudibranchs of various species including *Risbecia tryoni*, *Ceratosoma trilobatum*, and Spanish Dancers.



Emperor shrimp (near gills) of Risbecia tryoni nudibranch

Their coloration varies according to the “transportation partner” they ride on, but I am uncertain if they are able to change coloration if they happen to change transportation. Not content merely to relax and enjoy the ride, they are constantly on the move, normally perched near the substrate looking for food to



Emperor shrimp on sea cucumber near substrate looking for next meal



Emperor shrimp on Ceratosoma trilobatum nudibranch

pass by; I guess this is the marine version of “meals on wheels”?

In addition to providing the potential for sustenance, the noxious reputation of nudibranchs also provides some degree of protection since predators are reluctant to ingest them. But the relationship is really bi-directional as the shrimp keep the nudibranch free from parasites.

These animals are sometimes easy to photograph and at other times incredibly frustrating, moving around like puppies on their transportation host.

Most of these subjects can easily be shot at 1:1 with either a 60mm or 105mm lens. The exception is the zebra crab which was shot with a tele-extender.

Hopefully this discussion of hitchhikers on the reef will give you an idea for photographic subjects and where to find them.

Steve Norvich

Gone fishing

with Mark Webster

For most divers who are tempted to take up underwater photography perhaps the most attractive subject are the fish that we find in both temperate and tropical waters. This attraction endures as we gain more experience, but although we may conquer the technicalities of capturing an image, fish persist in being one of the most challenging and often frustrating subjects to master. Although fish are perhaps the most plentiful subject available they can also be the most uncooperative, wary and just plain difficult to compose well. But as with most subjects underwater you can improve your results by the combination of correct equipment choice, techniques and of course a great deal of patience!

You can use almost any camera system and lens combination to shoot fish in a variety of ways, but if you want to get close up and personal and seize the character of individual fish then you really need to work with a housed SLR system. The attraction of these cameras is not just the reflex viewing but also the tremendous flexibility of the macro lenses available which enable you to shoot subjects from infinity all the way down to reproduction ratios of 1:2 and 1:1. The other essential advantage is the absence of prods and framers which will distress most subjects. Dependant on the subject you are pursuing, there are three specific focal length groups to choose from - 50-60mm, 90-105mm and 180-200mm. There is also a 70-180mm macro zoom available from Nikon which covers all three groups in one lens, but is also the most expensive option both for the lens and the purpose built port to match it. The shorter focal lengths are best suited to images of whole fish within their habitat, groups of fish



Rock beauty - territorial species may well swim off initially, but if you settle on the sand and wait their curiosity will get the better of them. Have your camera and flash set up to go as each visit may be fleeting. Nikon F90X, 60mm, Subal, YS120 & YS30, Elitechrome EBX, f11 @ 60th.



Pork fish and grunts - the 60mm macro lens is perfect for most fish photography. You can capture a small school of fish like this, zoom in on a single fish or get closer still for a detail shot or a macro species. Nikon F90X, 60mm, Subal, YS120 & YS30, Elitechrome EBX, f11 @ 60th.

or perhaps part of a shoal or even larger fish at a distance. A 50/60mm macro lens can also be used at close quarters for portraits or detail shots but you may often find that you get too close for the comfort of your

subject at higher magnifications. If your desire is to shoot fish portraits or small shy reef fish then the workhorse lens will be a 90/105mm or perhaps a 180/200mm for really awkward subjects. The longer focal



John Dory - this species appears in our coastal waters in the early summer. If you don't rush your approach they will often pose patiently. Nikon F90X, 105mm, Subal, Inon quad flash, Velvia, f11 @ 125th.



Big eye Squirrel fish - a classic fish portrait which also shows something of the reef habitat. Nikon F90X, 105mm, Subal, YS120 & YS30, Velvia, f11 @ 60th.

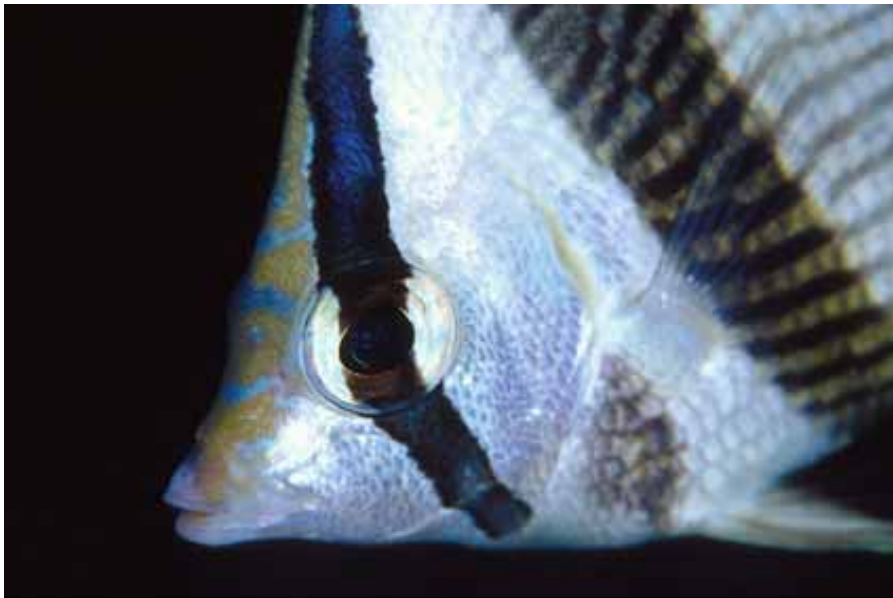
length of these lenses allows you to maintain a greater working distance from your subject which often keeps you out of the very sensitive personal space parameters which many fish possess.

Auto focus can be a real asset in fish photography as it allows you to concentrate on your approach and composition of the image. However, you must be aware of the point of focus and central point of interest within the image. This is more often than not the eye of the fish and it is essential to focus on this initially before you recompose the shot. The latest cameras available (F5, F100, F80) have the option of selecting the point of focus within the frame, which can offer significant advantages particularly where the subject is static. For users of older

technology (F4, F90X, F801) which have a centre weighted auto focus sensor you must become adept at using the single servo AF function or AF lock, both of which allow you to 'lock' the lens after initially focussing on the subject whilst you recompose for the perfect shot.

TTL flash works reliably with fish photography as the subject will mostly dominate the frame and present reasonably even contrast. However, there are circumstances which can fool even the most complex systems, which include very reflective silvery fish and those that inhabit pale sandy sea beds. These situations can cause your flash to underexpose the scene and where experience tells you this may occur it is time to resort to manual flash exposure or apply some

exposure compensation using the camera's controls. You don't need big wide angle strobes for this style of photography, although you will need a reasonable amount of power (perhaps an u/w GN of 28-33) for shooting fish from a distance with the longer macro lenses. One or two flash guns can be used effectively on easily adjusted ball joint or flexi arms - positioning will depend largely on the location of the subject although you may want to extend your guns forward of the housing for longer shots. Some photographers are turning to ring flash for macro subjects using the 105/200mm lenses, but these specialist guns can also be very effective for stand off shots of fish from surprising distances without incurring backscatter. Guns like the



Three band butterfly fish - coral fish are great subjects. Brightly coloured, boldly patterned and territorial. Nikon F90X, 105mm, Subal, Inon quad flash, Velvia, f11 @ 125th.

Nurse shark - unless there is food about sharks will not often stay for more than one or two frames. Having the camera set up with 'standard settings' at the beginning of the dive will help you capture a chance shot. Nikon F90X, 16mm fish eye, Subal, YS120 & YS30, Elitechrome EBX, f11 @ 60th.

Inon quad flash have a guide number of f11 at a metre (100ASA UWGN 33) and being port mounted will always be close to the subject. The other less obvious attribute is that fish are apparently less nervous when approached by a ring flash than they are by one or more strobes looming above them which they may see as a predator.

Obviously if you are setting your sights on particularly large subjects in shallow water, such as basking sharks, mantas or whales, you will need to use a combination of wide angle lens and natural light. You can let your camera calculate exposure for you in aperture or shutter priority mode, although my preference is to set the camera manually and use spot metering to read the light accurately throughout the image area.

Whatever lens, flash or film you have chosen, we are all faced with the same problem - how to get close enough to your subject? Firstly you must try to imagine what the fish makes of your appearance - this large noisy marine predator, making a determined approach probably with the intent of consuming you! So the first objective is to demonstrate that you pose no threat to your subject by making very slow calm movements looking for signs of distress and being prepared to stop and remain static in one position for long



periods or retreat if needs be. The noise from your bubbles can also distress some fish so it helps to breath very slowly and regularly with steady exhalations. By adopting a slow and very patient approach you will eventually be accepted as a part of the reef scene and overcome the natural fear of the subject and perhaps even earn some co-operation.

Fish are naturally curious and often territorial and will respond to this gentle approach by becoming increasingly inquisitive by making repeated passes and even posing for the camera. If you are able to visit a site regularly then you will find your subjects will become increasingly co-operative and some fish will appear as soon as you arrive to apparently greet you.

Initially you can concentrate on approaching the more sessile and stationary species of the reef such as topknots, scorpion fish, tom pot blennies or in the tropics perhaps moray eels and clown fish. These fish are either so convinced of their camouflage that they will let you make a very close approach, or they make their home in a fixed location and whilst may act defensively they will rarely move far from it.

Researching your target species to get familiar with their behavioural characteristics and habitats can also pay dividends. Busy tropical reefs are excellent for fish photography, not least due to the number and variety of brightly hued subjects. The density of the reef population means that many of it's residents are distracted by



Whip coral goby - small fish require macro techniques and knowing where to find a particular species will make spotting them much easier. Nikon F90X, 105mm, Subal, Inon quad flash, Velvia, f11 @ 125th.

defending their territory or watching for their natural predators that they will sometimes totally ignore the diver. So next you can begin to concentrate on the territorial species on the reef which may appear to move randomly at first, but careful observation will reveal the limits of their reef patch and often a repetitive 'patrol route' which will enable you to position yourself for one or more passes. Another example is cleaning stations which are a great place to encounter all sorts of species, or you might choose to concentrate on a specific habitat such as black corals or gorgonians in search of long nosed hawk fish. Certain very shy species are often associated with specific corals such as lemon gobies in table corals or the very elusive leopard spotted blennies in acropora corals.

Having practised your techniques on these species you can move on to the more challenging schooling varieties. Although it is most comfortable to dive in slack water conditions, you will often find that schooling fish, particularly plankton feeders, prefer areas where there is a current running. In these situations you will often find that these fish will tolerate a closer approach but this will involve either swimming



Lemon goby - these little fish are shy but very territorial and will repeatedly return to the same perch on their table coral. Pre focus on this spot and wait patiently. Nikon F90X, 105mm, Subal, Inon quad flash, Velvia, f11 @ 125th.

steadily against the current yourself or where possible using the shelter of the reef to make a close approach.

There are locations where there are resident schools of fish or the fish have become so accustomed to divers that they show no fear or may have been taught to expect an easy meal. The ultimate example of this are the organised shark feeds which are so popular in the Caribbean - you will certainly get your pictures in these situations but for me a part of the challenge is missing if your subject is performing for a reward.

Many experienced photographers prefer to dive solo and there is no doubt that the best fish pictures are taken when diving on your own or well separated from your buddy. Diving operators are becoming more liberated in their approach to solo diving, but you would be well advised to check before booking an expensive trip if this is your aim. There are occasions when a buddy is useful to either interact with your subject or perhaps encourage a school towards your lens, but generally two divers will spook your fish especially if the other one is a non photographer circling impatiently in the background!

Taking good fish photographs is not easy but getting the shot you want after that long wait is very rewarding. Once you have the co-operation of your subject don't be afraid to use film, perhaps an entire roll, as you never know when the right circumstances will prevail again for that particular species.

There is no magic formula but patient persistence will normally pay off and whilst you wait you will often find that other fish will show an interest in being photographed which could be a bonus or even a golden opportunity.

Mark Webster

Mark is the author of 'The Art and Technique of Underwater Photography' published by Fountain Press. Mark's website is: www.photec.co.uk

Infrared Films Underwater

by Mark Mumford



“The man must be barking mad!” I hear you say!

Well you must have recalled my article in Issue One about getting your local developer to correctly print negative films, and you remembered that colour levels drop off very fast underwater, with reds being the first to go. If this is the case (and it is!), then what on earth would we want with infrared films underwater?

You may also recall from my that article that one solution to the problem of colour loss is to shoot on monochrome film stock, as black and white film doesn't really care what colour is in front of it. And Kodak manufactures an infrared black and white film. Is it starting to fall into place yet?

KODAK High Speed Infrared Film is a high-speed film with moderately high contrast, sensitive to light and radiant energy to 900 nanometres (nm) in wavelength. It

is useful for [atmospheric] haze penetration and for special effects in commercial, architectural, fine art, and landscape photography.

Infrared films are sensitive to infrared radiation, some ultraviolet radiation, and to all wavelengths of visible radiation (light). They are not as sensitive to green light. Whatever the ultimate purpose of your photographs, infrared photography provides unusual effects obtainable by few other means.

While the film is sensitive to a very wide spectrum, it is generally used on land in conjunction with either a deep red (Wratten 25) or completely visually opaque (Wratten 87 series) filter. These filters remove the majority of visible light allowing the film to be exposed to just the infrared components. However, without these filters, it is quite usable underwater for natural light

Of course without any particular highlights, a fairly normal black and white photograph is obtained. As mentioned before, this tends to be more grainy than would be expected for the degree of sharpness, and effect that could probably be similarly obtained using conventional black and white film in a number of ways. You may notice in this photograph the lack of contrast in the background compared to the foreground subject. While this is usual underwater, it is exaggerated in this case, and I would put this down to the extra ultra-violet sensitivity of the film, and diffusion of light through the water.



On land, with a red filter, the film is noted for returning false “colours” compared to conventional black and white film, rendering objects that emit or reflect infrared light as white, against black for those that do not. Blue skies will be rendered black, and grass, foliage and skin-tones will be rendered white. Taken underwater of course, these effects will not be noticed. We cannot use red filters because we wouldn’t be left with any light at all! So used without filters, and at moderate depths, we will be recording using light primarily in the blue spectrum as the film is at least 10 times more sensitive to blue light than it is to green. In fact it is so sensitive to blue and ultra-violet that it might be worth using a skylight or UV filter to try and reduce this a bit.

This picture shows that the film can return quite good resolving power, but appears to be quite grainy (if that isn’t a contradiction). It is moderately sensitive to developer, and a fine-grain developer such as Kodak XTOL will return a more finely grained negative, albeit at lower contrast (that makes sense doesn’t it!).

photography, and gives some interesting results.

The real downside about using this film is caused by exactly those characteristics that gives it its special properties. The combination of high infra-red sensitivity, and the lack of an anti-halation layer means that the film must be loaded and unloaded from the camera in total darkness, which means in a proper changing bag. Even the film cassette isn’t safe, and enough light can get through the normal opening to ruin a film, which must be kept in the provided opaque containers. I

develop the film myself, not trusting even pro labs to get it right all the time.

On land, being primarily used for infra-red applications, an ISO rating cannot easily be given, as the film is sensitive to light that isn’t registered with conventional light meters. Underwater, I usually set it at ISO 200 which returns me a reasonably dense image, and I’m sure that it could cope with ratings from ISO 50 to ISO 400 or greater depending on the depth and the amount of UV penetration. Interestingly, the film has been

noted for returning different grain and sharpness depending on the speed that it is rated at - i.e. depending on the amount of exposure it receives! You might have spotted that the two examples shown previously that were taken on land have considerably lower grain and improved resolution.

If you enjoy black and white underwater images, then you might also want to experiment with this film. I’ve still got a long way to go with it, and would like to try it out for flash-lit macro work in true infra-red mode with a red filter. I



The other major special effect from this film is that of “blown” highlights. Shadows contain good detail, but highlights tend to blur into one another. This is because the film is fairly unique in that it does not have an “anti-halation” backing layer, so light that passes through the film isn’t absorbed by this layer, reflecting off the camera back and coming back through the film for a second time.

think that the next time that I use it for natural light wide-angle shots, then I will perhaps put a standard UV filter in front of the lens and see if that improves the background contrast.

Notwithstanding the purist approach, once you understand the special characteristics of the film, and how it behaves, a competent Photoshop operator should have little trouble simulating the effect given a standard black and white, or even colour, photograph. Working with infra-red negatives also gives you the opportunity to play with hand-colouring (or computer colouring) on a photo that starts out looking a little different!

What next? Kodak Technical Pan - a lithographic film - that’s what!

I’ll let you know!

Mark Mumford

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 its 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 autofocus 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>

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OCEAN LEISURE

Where next?

A beginners tale

By Gilbert Park

Land based photography has been a hobby for many years and when I took up diving four years ago it was natural that I started taking underwater photographs. I bought a Nikonos V and on my next trip to the Philippines clicked away merrily. When the prints came back I found out about the loss of red light at depth they all had a blue tinge! I bought a Sea and Sea YS50 strobe, to experiment with.

My next diving holiday was in the Dutch Caribbean. A PADI underwater photography course went a great way to helping understand the difficulties of underwater photography and even to get a few decent photographs. I realised that the standard 35 mm lens needed to be wider so I bought a Sea and Sea wideangle supplementary lens and viewfinder. The following years holiday showed some improvement, but the pictures were still not great.

Over a year passed until the next holiday, in Sharm el Sheik. The camera was serviced, an Ocean Optics close up kit bought, lots of film ordered and all the books reread. I was going to seriously get some good photographs this time.

One of the many good things about Sharm el Shaik is the one hour E6 processing in the centre of town, although I'm sure my buddies (all of whom were non photographers) weren't too amused about every evening having to drop them off and collect them later. But it let me take my photographs and see my mistakes, of which there were many and triumphs, of which there were few on the same day. The first day was a disaster. Trying to get back into diving and underwater photography at the same time was ambitious!

As the week progressed the diving and the photography got



better. The photography was still not right though. The first thing I noticed, I thought, was the lack of power of the strobe. Other pictures such as my friends being taught on the sandy bottom at a shallow depth seemed better.

When I got home I was puzzling over this problem and realised that the YS50 is not a very powerful strobe, the diffuser needed for the wide angle lens reduced the output and the wide angle converter. I decided I needed a new, more powerful strobe. Should I get one that I could use as part of a pair (and the connecting cable) or one that was powerful enough to use by itself? Whatever I did was going to cost about £500 - 1000. Then I discovered if I went double that I would need at least one new arm. Cost per arm £ 100 - 200.

The other problem was the framing. Trying to balance available light by looking through the viewfinder at the exposure information and framing through the optical viewfinder was not the easiest thing in the world for me, an occasional underwater photographer. Was it time to invest in a housed single lens reflex camera? My current land cameras include a Nikon F100 and an F801. Housings for both of these are available from Ikelite, Sea and Sea and Subal. The cost with port, gears etc ranged from £1200 to £2000 new!



Serious money was being discussed here. I visited many sites on the web to try and make the best decision. This added to the confusion.

Both Ocean Optics and Cameras Underwater both were very helpful but clearly wanted me to buy their products. The other thing I realised was that trading in my Nikonos V was not going to go far in paying for the new system. What to do? I am not a professional photographer and my Scottish upbringing made me feel nervous about spending thousands of pounds for something I may only use two or three weeks a year without being sure what I wanted. Second hand gear was one option, but even that was going to be expensive.



I decided that I would buy a new strobe. Whatever happened that was going to be useful. Then I contacted Regal Holidays and found they had a photographic holiday with Steve Smithson from the New Horizons Dive Centre I spoke with him at length. In the end I arranged to hire a housed F90x SLR and a prime 15 mm lens for the Nikonos V for that week. Now I could make my decision based on knowledge.

So it was I came to be in Hurgada with Steve Smithson and his “assistant” Richard Whiteley courtesy of Regal Holidays and Emperor Divers to spend six days improving my underwater photographic skills and deciding what to do next.

I had spoken to Steve on several occasions about what I wanted from the week. His first suggestion was that I tried using the Sea and Sea 15mm prime lens and matching viewfinder on my Nikonos. First dives on that day I did just that. One of the advantages of this course is that at the end of each day Steve processes the films and later that night we all met to constructively review our successes and failure.

At the end of the first day I learnt the need to get close to the subject and the importance of metering for the background. At the beginning of the second day I learnt the importance of reading instruction books. Two flashes into the first dive then nothing. Underwater I realised what the position “Accu” was for on my new strobe. Although I had religiously plugged it in every night not turning the switch to that position meant it didn’t charge. On the second dive it was ambient light

photography.

I continued with the 15mm lens using it for reef and wreck photography until the afternoon of day 5. For this dive I used all my own gear. For the night dive I used the 35mm lens and the Ocean Optics close up lens. The 35mm lens was crisp (see the octopus from the night dive). I just could not get to grips with the close-up attachment. The prongs were visible in every picture. The 15mm supplementary lens gave sharp results but only from about one meter away despite stopping the lens down. The first thing I had learnt on this trip was the need to be close and this stopped me.

During the week I also learnt how little I knew about the use of strobes underwater despite hours spent on the web. Power is not that important. As you dive red light starts to disappear noticeably at 8 - 10 metres. This is despite the hugely powerful strobe called the Sun being just above. The same will happen with a strobe, except the distance the light has to travel is double the strobe to subject distance. Anything more than two to three metres away is going to have a significant reduction in red. Buying the most powerful strobe may not be the answer after all.

At this point I knew why and what I was going to do. I was not going to buy a housing. They are not cheap, difficult to pack and terrifyingly expensive if they flood. I was going to buy a 15mm lens, viewfinder and the focusing aid that has two torches showing where the correct focusing spot was for the close-up lens. Relatively inexpensive and easy to pack.

I had booked a housing to hire for the last day so I tried a Sea and Sea 90x housing with a Nikon 90x body. The first dive I used a 20mm wideangle and the second a 60mm macro lens. What a mistake! I was hooked. Despite spending almost all of a week working hard with my Nikonos the pictures from these two dives were the best of the week and none of them were a struggle. Suddenly photography had become fun again.

Any one want to buy a Nikonous V? I have just bought a Subal housing for my F100 - fabulous!

Gilbert Park

O ring maintenance

by Peter Rowlands

There can be fewer, more hostile environments in which to take photographs than underwater. The combined elements of water and pressure impose considerable limitations on us both physically and photographically in a way that should make most sensible people give it a very wide berth. And yet we are still here, pretending to enjoy it, spurred on by the occasional good shot which makes us forget the aggro, both financial and physical.

O rings are the most ingenious, yet simple devices without whose existence we would certainly not be where we are today. These small cross sections of moulded compressed neoprene are the key to our survival and deserve more attention than they often get.

In order to do its job properly, an O ring must be lightly lubricated



Don't use any sharp tools to lift the O ring out of its groove. Most O rings can be removed without the need for any tools. Stretch the O ring slightly to cause a loop which can then be lifted out of the groove. This can be done on Nikonos cameras (above right) or housings (above left)



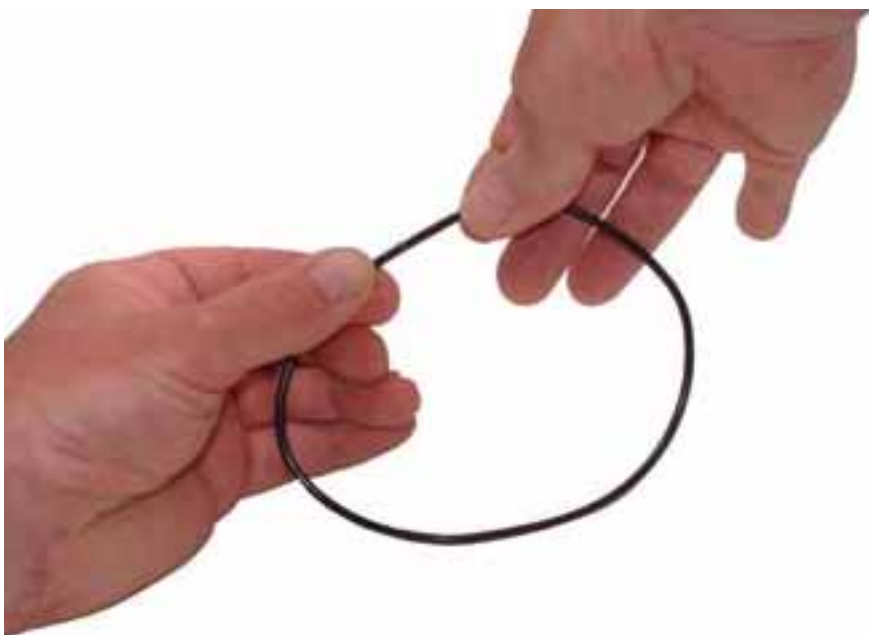
With the O ring removed, the groove can be inspected and cleaned if necessary. The most effective tool to do this is a stiff bristled toothbrush. Cotton buds are also useful but may leave fine hairs if you are not careful. Perhaps the best combination would be to run a cotton bud along the groove to remove any excess grease and then use the toothbrush for a final clean.



Only a small amount of silicone grease is needed to lubricate the Nikonos V O ring. Just enough to make it shine. The grease is being applied from an Ocean Optics silicone grease applicator/syringe and it contains enough grease to last a long time.

There are still quite a few underwater photographers who believe that the more grease you apply, the better the seal. This is far from correct as it could migrate into the camera and affect the shutter performance.

The easiest way to spread the grease onto the O ring is to pull it through your fingers a few times until it is evenly coated and the surface should shine without there being any excess grease.



to keep it supple. Silicone grease is used for its inert properties and continuing viscosity under heat and must be applied to all black user servicable O rings such as rear doors, battery compartments and flash plugs. (A new generation of blue silicone O rings are used by some manufacturers such as Sea &

Sea and these must be greased with the special grease they supply).

The O ring surfaces are just as important as the O ring itself and must be kept clean. This is done by removing the O ring with a soft edged tool or, if it is the large rear door O ring on a Nikonos V or main O ring on a housing, stretching it

slightly to cause a loop which can then be lifted out of the groove. A firm bristled toothbrush is very good for cleaning these grooves as it leaves no fine hairs as cotton buds can do.

The cleaning and regreasing of an O ring takes just a few seconds. What takes a lot longer is the debate as to how often you need to do this. Some look upon this operation as a form of therapy during dives, the gentle pulling of an O ring through lightly greased fingers could be likened to the holding of one's childhood blanket to one's ear while sucking one's thumb. Others leave their O rings alone for days at a time and still don't have problems.

What level of perfection you choose is up to you and if it has worked for you thus far I would be foolish to encourage you to change. All I can say is that there is less need to maintain O rings on a liveboard boat as opposed to a shore diving trip as there is far less chance of sand bridging an O ring groove.

If there is one main reason why underwater photographers have problems it can usually be put down to lack of preparation.

I've seen it so many times when a dive plan is changed at the last minute resulting in a hasty change of lens or film. The sudden urgency nearly always ends up with an O ring dislodged, a control left off or a film not wound on properly. It is better to either stick with the rig you've got or not take it at all rather than risk thousands of pounds and the rest of your holiday ruined.

Underwater photography is worth it when everything goes well and you can help yourself with careful preparation. It doesn't take long and it will increase your success rate.

Peter Rowlands
Ocean Optics Repair Dept

repairs@oceanoptics.co.uk

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Nikonos 111 camera £250.
Nikonos 35mm lens £80. Nikonos
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Wide angle primary lens to fit
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Book a classified in UwP

A classified advert in UwP will be downloaded over 35,000 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 35,000 underwater photographers.

No other magazine can offer such a concentrated circulation.

We recommend that you use e mail as your contact address.

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

The Nikonos V

A Statement From Ocean Optics

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

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

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

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

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



**The Ocean Optics Team
London**

Underwater Photography

a web magazine

Guidelines for contributors

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

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

Uw photo techniques -

Balanced light, composition, wreck photography etc

Locations -

Photo friendly dive sites, countries or liveboards

Subjects

Anything from whale sharks to nudibranchs in full detail

Equipment reviews -

Detailed appraisals of the latest equipment

Personalities

Interviews with leading underwater photographers

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

My e mail is peter@uwpmag.co.uk

How to submit articles

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

1. The text for the article should be copied from your word processing file and pasted into the body of the e mail.

2. Images must be "attached" to the e mail and they need to be:

Resolution - 144dpi

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

File type - Save your image as a JPG file and set the compression to "Medium" quality

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

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

We pay a flat fee of £50 (+VAT if invoiced).

I look forward to hearing from you.





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, Maldiv 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

Improve your image

Subal

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

Now available for the Nikon F100.



Subtronic

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



Nexus



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.

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.

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

Ocean Optics

13 Northumberland Avenue, London WC2N 5AQ
Tel 020 7930 8408 Fax 020 7839 6148

Visit our web site for the latest news and special deals

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