



Indonesia's Leading Dive Resort



Bunaken Oasis offers world-class luxury accommodation with world renowned scuba diving sites in the heart of Indonesia, Bunaken National Park in North Sulawesi. Five-time winner of Indonesia's Leading Dive Resort at the World Travel Awards

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A web magazine

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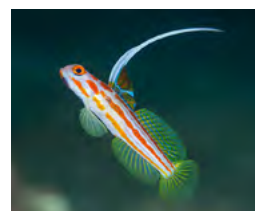
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Underwater Photography 2001 - 2024
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Publisher/Editor Peter Rowlands
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peter@uwpmag.com

Physical get togethers

I make no bones about devoting six pages of 'Tatler' style coverage to the UPY Awards Ceremony held in Mayfair, London on Friday, February 9th because this was a first of its kind for the Competition.

Saeed Rashid's excellent pictures capture the atmosphere perfectly - the excitement, joy and celebration in a room full of 2024 winners.

The big difference at this particular event was there was no static display of winning images - these were all presented on a high quality LED screen. This provided undistracted time and space for the winners to socialise and get to know each other. A chance to chat to someone you have always held in high regard, admired their work but never actually met face to face.

Lots of underwater photographers meet on dive sites but they are usually absorbed getting ready for a dive and setting up a camera.

The UPY Awards Ceremony was a concentrated social and worked so well because of it. It was facilitated by The Crown Estate, longterm sponsors of the Living Together Category and it took UPY to an even higher level.

Hopefully now my appendix and I have gone our separate ways, I'll be able to attend next year :-)

Editorial

Focal length? Field of view forever

Alex Mustard's precise review of Nauticam's excellent new FCP-1 water contact port gives me the perfect opportunity to get my fork out and rake over some old ground in the hope that positive seeds will be sown to simplify the confusing world of lens specification.

In the old days it was so easy. Apart from marketeers meddling with 110 format, there was, in the main, just one film/sensor size - light sensitive 35mm film (35mm is the physical height of the film) exposed to light via a shutter - 36mm wide x 24mm high. This was shortened to 35mm and everyone knew where they were and what it meant.

Lenses were designed to cover this format in a variety of designs to achieve different angles of view. Theoretically these variations of view could be quantified as Focal Length - the longer the number the narrower the coverage and vice versa.

This resulted in familiar terms/numbers which we were able to associate with. 20mm very wide (94°),

35mm wide (54°) and 50mm standard (40°) etc etc.

Did you notice how I quietly slipped in the angle of coverage (or field of view)? That's because this number (or angle) is now more important than ever before because the simple days of '35mm' are, to an extent, over.

We now have various sensor/shutter sizes other than just good old 35mm. True it still exists and is now called 'full frame' but there are smaller sizes - 1/2", 2/3", M43rds, Super-35, DX, APS-C, etc. Ideally all of these formats need matched lenses but, with adaptors, manufacturers allow us to 'mix and match' but this should really be called 'mix and mismatch'. The choice becomes bewildering.

However, at the end of the day, all we should really be interested in is "What field of view will I get?". Lenses could then be described as M43rds, F4, 90° - M43rds sensor format/size, F4 maximum aperture, 90° angle of coverage. Likewise DX, F2.8, 130°.

That seems so simple to me.

Shoots of recovery

Judging by the record number of entries in this year's UPY Competition, the days of the 'C' word and the 'L' situation seem to be well behind us and camera sensors are being exposed more than ever before in ever more remote areas.

Commercial airlines have had to make important business decisions since then regarding the reopening of flights to smaller airports.

Take Egypt as a good example where Hurghada for decades was the main airport for flight arrivals to the west coast. In time, as it became busier and busier, decisions were made to develop smaller airports to take the load off Hurghada and so, for example, Marsa Alam, a few hours coach ride to the south, became attractive to tour operators like TUI in the UK.

The gradual reopening of these 'arteries' is vital, making it much easier to arrive locally and be in your resort within minutes rather than extra hours and that, certainly for me, is a big attraction. Here in the UK we are lucky to have the world class diving Red Sea so comparatively near and I plan to take advantage of that again and again.

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www.uwpmag.com

News, Travel & Events

World Shootout winner



Hundreds of photographers from 54 countries competed across nine categories, pushing the boundaries of creativity and technical skill.

Grand Prize Winners:

Picture of the Year: Spanish photographer Eduardo Acevedo “secured” the top Honor with the prestigious prize the “boot Dusseldorf Director’s Prize, earning an Andromeda statuette and a €2,000 cash prize.

Best 5 Images Portfolio: Luc Rooman from Belgium triumphed in

this category, winning a dream 4-week diving trip for two to Papua New Guinea, valued at \$18,900.

Amateur Photographer:

Alexandra Ceurvorst from the USA impressed the judges with her talent, taking home the 1,000 € cash prize award.

Celebrating Diversity and Innovation:

This year’s competition saw 11,680 entries from 964 photographers, showcasing a remarkable spectrum of skills and



perspectives.

From the intricate wonders of Macro photography to the beauty of “Black Water”, the “Underwater Fashion” category added a touch of artistry and innovation, while the ever-important “Environmental & Conservation” category served as a powerful reminder of the need to protect these fragile ecosystems.

Looking Ahead: AI and Ocean Conservation:

World Shootout founder and producer David Pilosof unveiled an exciting addition for the 2024 competition: this year the Environmental category will be focusing on the impact of plastic on our oceans and future. This category

will embrace the potential of AI or other editing software as a tool to amplify the conservation message.

Entrants will submit campaigns of three original underwater photographs dealing with plastic pollution, along with their final AI assistance processing. This innovative approach encourages artistic expression while raising awareness about a critical environmental issue.

www.worldshootout.org

UPY winners 2024

Alex Dawson has been named Underwater Photographer of the Year 2024, for his image of a free diver examining the aftermath of whaling.

Whale Bones beat more than 6,500 photographs from around the world.

“Whale Bones was photographed in the toughest conditions, as a breath-hold diver descends below the Greenland ice sheet to bear witness to the carcasses,” Alex Mustard, who chaired the judging panel, said.

“The diver’s suit and torch give it a ‘visiting alien’ feel.

“The composition flows effortlessly and takes your eye on the right journey to tell the story.”

The contest has 13 categories, including Macro, Wide-Angle, Behaviour and Wreck, as well as four for photos in British waters.



Jenny Stock was named as British Underwater Photographer of the Year 2024, for Star Attraction.

A carpet of marine life, brittle stars and sea urchin, in Loch Leven, Oban, Scotland.

IMAGE SOURCE, “Loch Leven is a Scottish dive site near Oban,” she said.

“As I descended into the dark green depths of the sea loch, on a dusk dive, I approached an area where my torch picked out the vivid colours of a living carpet of thousands of brittle stars.

“I was happily snapping away, when I spotted this purple sea urchin and I got really excited.

“A dominant star next to this graphic invertebrate created a beautifully balanced pair, perfectly surrounded by an entanglement of the background.”



Lisa Stengel, from the United States, was named Up & Coming Underwater Photographer of the Year 2024, for her image of a mahimahi catching a sardine, in Mexico.

A mahi-mahi catching a sardine, in Mexico

“If you listen closely, there’s an enormous amount of sound in the ocean, especially surrounding bait balls,” Stengel said.

“I honed in on the sound of mahi attacks and followed this unmistakable sound with my camera.

“This technique, coupled with serendipitous conditions, gave me the window of opportunity to capture this special moment.”



©LISA STENGEL/UPY2024

Portuguese photographer Nuno Sá was named Save Our Seas Foundation Marine Conservation Photographer of the Year 2024, for Saving Goliath, showing beachgoers trying to save a sperm whale stranded near Costa da Caparica, just across the river from Lisbon.

Beachgoers try to save a stranded sperm whale in Portugal

“A massive sperm whale seemed to be struggling to swim as it slowly moved towards the coast, reaching the shallow waters of the beach,” Sá said.

“Together, they try to help the giant back into the sea.

“Several hours later, the whale takes its last breath, its body crushed by gravity as it lays on the sand.”



©NUNO SÁ/UPY2024

www.underwaterphotographeroftheyear.com

Students impress industry judges at underwater photography Red Sea exhibition

In December 2023, a group of Marine & Natural History Photography BA students embarked on an underwater photography trip to the Red Sea. From dolphins and turtles to sharks and rare 'Shaun the Sheep' nudibranchs, the students captured a wealth of wildlife on camera, and their final images impressed industry experts at last month's exhibition.

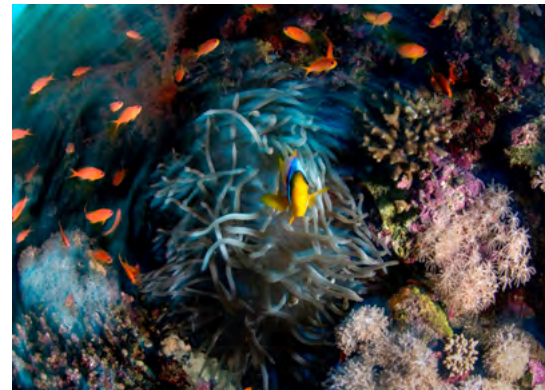
Reflecting on the trip, Marine & Natural History Photography BA lecturer Gina Goodman said: "Egypt is always a special trip for so many reasons: the wildlife, the setting, the people, but mainly because during those two weeks we get to bear witness to those special photographic moments. Not just the ones where we encounter big awe-inspiring wildlife, but the smaller moments, when students get out of the water with wide smiles and you know that

something has just clicked for them. That after that one dive they suddenly have a grasp on a principal they didn't quite have the hour before. It's an incredible, wonderful moment to be a part of. It's the start of a career."

Upon returning to the UK, the students got to work preparing for the Red Sea exhibition, which has become a notable date on the local calendar, drawing attendees from both the dive and photography industries across Cornwall. This year, the photography competition returned with even greater support and sponsorship from brands including Finisterre, Fouth Element, Nauticam UK, Magic Filters and Seaways Diving.

Inspired by this work?

Falmouth University offers an ideal setting for mastering the art of capturing nature's beauty.



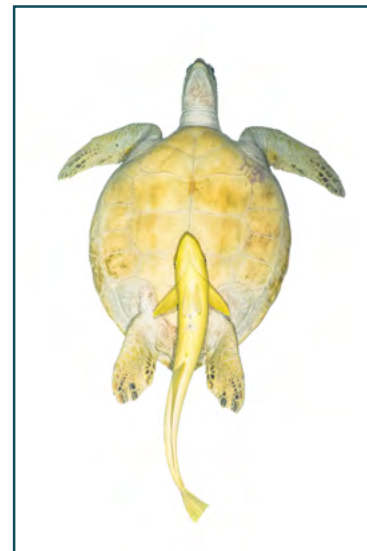
Top right: BBC Wildlife cameraman Doug Anderson addresses the audience

Left. Imagination category winner: Flora Tomlinson-Pilley

Below left. Wide Angle winner: Ben Lindberg

Below centre. Macro winner: Connor McGuinness-Dean

Below right. Most Promising award winner: Victoria Ward



11th Annual Photo Competition For UN World Oceans Day 2024 Theme “Awaken New Depths” Closing date April 7th 2024

DivePhotoGuide (DPG) is pleased to announce the opening of the 11th annual Photo Competition for UN World Oceans Day, surrounding the 2024 theme “Awaken New Depths.” Complementing the UN’s day-long World Oceans Day celebration at the UN Headquarters in New York.

This year’s competition draws on the power of the arts to expand our perspectives and appreciation for our blue planet, build new foundations for our relationship to the ocean, and ignite a wave of action towards necessary change.

The 2024 Photo Competition for UN World Oceans Day is a free and open-to-the-public competition coordinated in collaboration between the United Nations Division for Ocean Affairs and the Law of the Sea, DPG, Oceanic Global, the United Nations Department of Economic and Social Affairs, the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, the Intergovernmental Oceanographic Commission of UNESCO, and

Nausicaá.

The 11th annual competition presents a unique opportunity for photographers to showcase the immense breadth and depth of the ocean’s beauty as well as to shed light on the lesser-known promise and potential brimming beneath its waves.

From now until April 7th, the following five categories are open for submissions: “Awaken New Depths,” “Small Island Developing States,” “Big and Small Underwater Faces,” “Underwater Seascapes,” and “Above Water Seascapes.” Winners will be announced during the hybrid UN World Oceans Day event – this year celebrated on June 7th in New York – hosted by the Division for Ocean Affairs and the Law of the Sea, in partnership with Oceanic Global, and published shortly afterwards on:

www.UNWorldOceansDay.org
www.DivePhotoGuide.com



Underwater Landscapes winner 2023 - Andy Schmid (Switzerland).



Putting the Ocean First winner 2023 - Tom Shlesinger (Israel).

Gregory Sweeney Photography Adventures



Underwater Safari in Baja, Mexico

A Striped Marlin & Baitball Frenzy at Mag Bay
with Diving at Cabo Pulmo

www.GregorySweeney.com November 2024

Grand Cayman UW Photo Workshop September 28-Oct 5, 2024



Welcome to our GrandBlueProject

Our website is home to a vast and fascinating collection of videos featuring thousands of different species of marine life. From majestic whales to tiny seahorses, our video library has it all.

Explore the wonders of the deep blue sea from the comfort of your own home and witness the beauty of underwater life like never before.

Dive into our video library today and discover a whole new world beneath the waves.



www.grandblueproject.com

Grand Cayman is the ideal place to learn everything you need to know to take great underwater images.

The water is warm, the reefs are colorful, the fish are plentiful and there are some bonuses too! Grand Cayman is well known for the friendly Southern Stingrays at Stingray City. We will have the opportunity to spend a sunrise with them practicing split shots, (over-under or half/half) and other techniques that are only possible on these shallow sandy banks.

Grand Cayman is also home to the Kittiwake wreck, a ship that was purpose sunk for divers in 60 feet of clear water offering endless

possibilities for learning techniques for shooting shipwrecks.

Join award winning photographers, Luca Crudeli and Brook Peterson on a workshop designed to change the way you approach underwater photography. We will have image reviews in the evenings along with presentations designed to elevate your photography skills. This workshop is intended for beginners through professionals who want to join a group of individuals who love underwater photography.

Includes all room taxes.

www.waterdogphotographyblog.com

Baja Mexico Dive Safari including Magdalena Bay for Striped Marlin



In November 2024 Photographer Gregory Sweeney will be leading this peak season photography trip to dive and photograph the best locations in Baja, Mexico.

Port San Carlos and Magdalena Bay is host to the largest striped marlin migration in the world. We will be on our own boat from 7am to 4pm looking for sea birds who will point us to the epic hunting action underwater. The marlins hunt the sardines as do the sharks and seals. Under the surface will be a frenzy of action as marlin hunt in cooperation maneuvering the bait balls until one by one they attack and take their

meal. We often get a static bait ball for over half an hour.

Our 2023 season surprised us with more whale encounters on Magdalena Bay and many static schools of sardines. Under the water we were surprised by brilliant shiny gold dorado / mahi-mahi fish joining the attack on the sardines. With marlin, sea lions, dorado, a whale, and dolphins all joining the frenzy, it was a dream to photograph. The sardines were using our bodies and cameras to hide from the predators.

After the sardine run action, we go to Cabo Pulmo National Park where protected marine habitat

and pristine coral draws an enormous amount of tropical fish, seals, turtles, and more. Large schools of jacks are an awesome sight as the formation pulses and morphs before us. Bull sharks lurk and patrol on the scattered remains of ship wrecks and abundant sea life lives on the pristine reefs of the protected area.

This unique and action packed trip showcases the best of Baja Mexico and has plenty of marine wildlife encounters and photo opportunities.

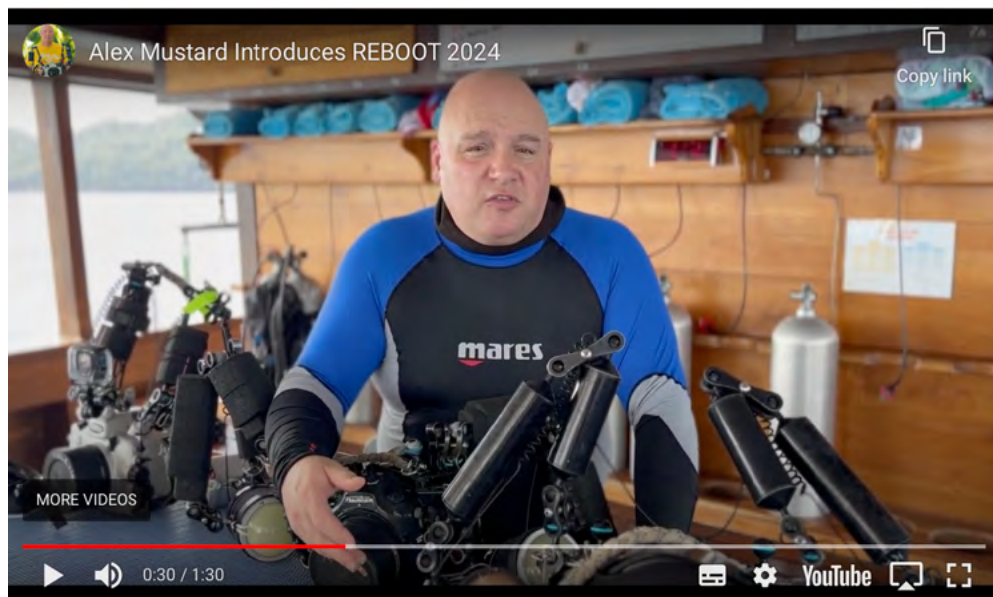
Contact Gregory Sweeney for



more information

info@gregorysweeney.com
www.gregorysweeney.com

Alex Mustard introduces REBOOT 2024



Reboot is an extensive course covering the fundamental topics of wide angle, macro, composition and lighting underwater. Quite simply Alex has packed everything he feels is important to producing stunning underwater images into this course, it is a total course on excelling at underwater photography. The course is for photographers new to Alex's teaching as well as who have attended his workshops in the past.

Alex Mustard wrote the Reboot course during 2020 and presented it live and interactive for 7 groups of photographers during 2021.

The live Reboot course cost £245 GBP. In 2024, Alex refreshed and

updated the Reboot materials and made these master recordings, which are now available for just £95 for 5 years of unlimited online access.

"There is a massive amount in this course," says Alex. "The course covers 4 broad topics: Wide Angle, Macro, Composition and Lighting. Each topic is divided into two presentations, each an hour long. Reboot is based on research: I re-read my own books, articles and talks and also those of others, I looked at 100s of stunning images and noted down every nugget that I felt was important for stand out pictures. I then structured this advice into the Reboot presentations. The final part was more



organic. I found that as I ran this masterclass for the 7 groups of photographers in the live sessions, the content evolved with their queries, and I added slides to answer their questions before they asked them. This meant that Reboot grew and with some updates from 2021 to 2024 tech it is now split into 8 presentations! I'd never try and teach so much in a talk on a workshop. But with Reboot I know you are watching a video and expect you to pause and re-watch the material, and really absorb all the advice."

Alex uses beautiful images, stills of photographers in action, some underwater video and practical demonstrations with underwater camera gear to aid teaching.



<https://www.photographyexperts.com/courses-subscriptions/underwater-photography-reboot>



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2024 Beneath the Sea Dive, Travel and Oceans Exposition

March 22 - 24, 2024

Meadowlands Exposition Center
Secaucus, New Jersey

Grand Prize
Beneath the Sea



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What's
Happening
This Weekend



Dive into a world of extraordinary beauty and discover the captivating realm beneath the waves.

Waterpixels is an innovative online community designed to connect professionals, industry experts, enthusiasts, and newcomers who share a passion for underwater imaging. Waterpixels is here to provide an engaging and inclusive space where you can explore, learn, and connect with like-minded individuals from around the globe.

Join us and become part of a thriving community of underwater imaging enthusiasts. Together, let's dive into the depths, capture awe-inspiring moments, and celebrate the beauty of the underwater world.

www.waterpixels.net

<https://beneaththesea.us>

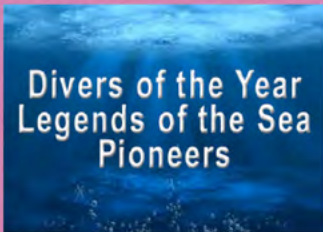
SEMINARS
FROM TROPICS
TO POLAR ICE



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Photo Albums



2024 Digital Shootout, Little Cayman June 15-29, 2024



The Digital Shootout, hosted by Backscatter, is a renowned annual event for underwater photography and videography enthusiasts.

This immersive experience offers workshops, seminars, hands-on demonstration gear, and personal instruction in stunning underwater locations. It allows participants to refine their skills and stay up-to-date with the latest techniques and underwater photography equipment.

Our on-site staff includes top-level experts from Backscatter, top brands, and world-renowned experts.

More than just a learning event, The Digital Shootout creates a vibrant community of like-minded individuals who share a passion for capturing the beauty of the underwater world, making it an unmissable opportunity for beginners and experienced photographers and videographers.

There's even a friendly competition with outstanding prizes to keep things fun! Take it seriously or take it slow, the Digital Shootout is an underwater photography/videography vacation designed to take the shooter in the group to the next level.

If you're a new or an intermediate shooter, the Digital Shootout is our fast-track to better underwater imaging. In six days of seminars and diving, the Digital Shootout team will help dial in your underwater system and shooting techniques. Enter your best images in the final contest to win trips and gear from our sponsors.

In early 2009, Little Cayman Beach Resort completed major room renovations to its popular dive resort. Guestroom upgrades include new furnishings inspired by tropical colors and textures, Caribbean themed artwork, newly decorated



bathrooms, fixtures and flooring. We have a total of 40 air-conditioned, spacious rooms situated in two-story 'palm-tree height' buildings and surrounded by lush tropical foliage.

Each afternoon we offer professionally produced seminars on basic and advanced photo and video techniques. Just learning how to assemble your camera for the first time? Looking for the secrets of exposure and strobe placement? Our seminars are world renowned for their simple delivery of complex topics and will take you to the next level.

The workshops and experts



assembled at this event will whisk you along the learning curve of underwater photography. By the end of the week, you will be shooting well enough to enter our friendly competition. The best images shot during the week will be awarded over \$30,000 in prizes.

www.backscatter.com
www.thedigitalshootout.com

www.uwpmag.com

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- Huge Camera Room
- Very Few Stairs
- Small Resort - only 15 rooms



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www.nad-lembeh.com



New Products

The Nauticam NA-GFX100II Housing Now Shipping!

The NA-GFX100 II is built with the singular focus of creating an underwater housing that blends ergonomic design, intuitive control placement, and rugged field-tested durability. The resulting machined aluminum housing can be further refined with the addition of accessories from magnifying viewfinders to external monitors/recorders. Achieving the full benefit of the stunning 102MP resolution requires the use of underwater optics that are designed with high-resolution lenses in mind to deliver the highest optical quality possible.

The NA-GFX100 II is designed with our Mission Control philosophy which dictates placing controls where they are needed most, meaning no more missed shots fumbling for a control or dial. The majority of exposure and focus controls are within easy reach of the ergonomic handles that feature stainless steel stiffening brackets to reduce any unwanted movement even when using large strobes or video lights. A multi-direction pad on the upper right of the rear panel gives access to the camera's joystick. A double



lever near the right handle activates the 'AF-ON' and 'Q' controls. Also on the right side are levers for Focus and View modes. Also, a new front lever to quickly switch between aperture and ISO sensitivity. The left side has a double lever for 'PLAYBACK' and 'DISP' as levers for turning the EF-X20 TTL flash on or off and a front double lever to access Fn5 & Fn6. On top of the housing is a lever for switching between 'STILL' and 'VIDEO' modes.

Built around the N120 Port System, the NA-GFX100 II supports a variety of GF-mount lenses with a selection of optical-quality glass



and acrylic ports as well as access to Nauticam's lineup of premium professional optics. These optics are designed using industrial lens design software to provide unparalleled optical quality and impressive fields of view.

The Wide-Angle Conversion Port 2 or WACP2, when used with the Laowa 17mm f/4 GFX Zero-D lens can achieve an impressive 140° FOV with an almost 0" minimum focus distance and incredible corner sharpness even at wider-open apertures such as f/5.6.

Flash triggering is via the optional 26351 Flash Trigger for Fujifilm and built-in fiber-optic bulkheads. An option for electronic strobe connection without TTL is also possible using the optional M14 Nikonos bulkhead with a universal hot shoe.

The GFX100 II can output high-quality uncompressed 4K video over HDMI and the NA-GFX100 II is



compatible with the Nauticam HDMI 2.0 system via the front M24 bulkhead. Even when recording video internally, the use of an external monitor over either HDMI 1.4 or 2.0 is a great tool to help with composition or image review.

The NA-GFX100 II comes with the Nauticam vacuum check and leak detection system as standard equipment.

NA-GFX100II Details:

Model Number: 17160

Port Opening: N120

Depth Rating: 100m

AUD Retail Price: \$10576 (inc. GST)

CNY Retail Price: ¥43500

Euro Retail Price: €7210 (inc. VAT)

GBP Retail Price: £6286 (inc. VAT)

HKD Retail Price: \$50896

USD Retail Price: \$7644

www.nauticam.com

INNOVATIVE UNDERWATER

Shipping begins on March 8th 2024

NA-A9III

For **SONY A9III** Camera **PN#17437**

- Full Frame Global Shutter
- Patented Port Locking System
- Mission Controls



NA-GFX100II

For **Fujifilm GFX100II** Camera **PN#17160**

- Medium Format
- Wet Lenses



85204

WACP-2

85205

WACP-C

85206

WACP-1B



NA-TG7(BM/M52)

For **Olympus TG7 / TG6 / TG5** Camera **PN#17820/17821**

- Compact System
- Clear labels & Dials
- Integrated Bayonet Mount or M52
- LCD Magnifier



Built on a foundation of innovative product design & modern manufacturing technology, the TG7, GFX100II and A9III embodies Nauticam's Mission Control design philosophy placing essential controls within easy reach of the reinforced molded handles.

Nauticam
innovation underwater

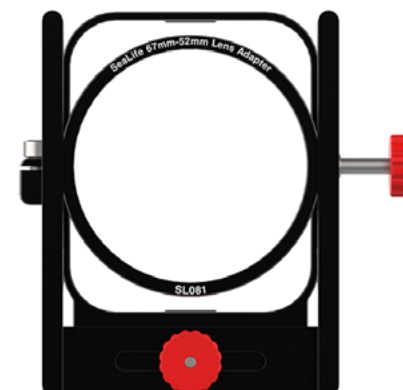
www.nauticam.com

SeaLife 52mm Wide Angle Dome Lens and Lens Adapter for the SportDiver Smartphone Housing

As well as its new six-inch Wide Angle Dome Lens, SeaLife has announced a 52mm Wide-Angle Dome Lens also designed specifically for its SportDiver smartphone housing. Unlike the six-inch Wide Angle Dome Lens, the 52mm Wide-Angle Dome Lens requires the new Lens Adapter for mounting to the SportDiver housing.

Machined from hard anodized aluminum and boasting stainless-steel hardware, the Lens Adapter features a standard 67mm thread, while a 52mm threaded ring is included for attaching lenses with 52mm threads. As such the Lens Adapter is designed to allow SportDiver users attach any close-up or wide-angle wet lens: In order to center your wet lens over the phone's intended shooting lens, the adapter allows you to easily adjust the position of the mount horizontally and vertically.

The new 52mm Wide-Angle Dome Lens features four optical elements in four groups, and like the six-inch Wide Angle Dome Lens, it is made using high-grade acrylic optics. SeaLife says your phone camera's shooting angle is increased by 43% and you can get up to three times closer to your subject. Keep in mind that it won't allow you to achieve split



shots like the new six-inch Wide Angle Dome Lens.

Retailing for \$350, the new 52mm Wide-Angle Dome Lens is available now, while the new Lens Adapter for the SportDiver housing costs \$150.

www.sealife-cameras.com

www.uwpmag.com



UPY
2024

Category Sponsor



BBFSF
Partner

Photo by
Scott Portelli

CUSTOM COLORS

Black Silver Grey

Olive Green Yale Blue Burgundy

MODELS

MX-R5	MX-R5C	MX-R6	MX-R6II
MX-R7	MX-A7RIII	MX-A7RIV	MX-A7IV
MX-A7RV	MX-A7SIII	MX-A1	MX-FX3
MX-Z6I/Z7II	MX-Z8	MX-TG6/7	MX-RX100M7

Best-in-class design, Compact and lightweight. Made by uniquely anodized aluminum, Superb scratch resistance with multiple color options.

MX Housing

Mirrorless Camera

MX-Z8

MX Strobes

Apollo 5 Apollo III Apollo Nano

Marelux developed three innovative strobes, world's first TTL HSS RC compatible UW strobe, with wireless trigger, patented design including wireless signal transfer.

MX Wet Lens

Aquista 90 Wide Angle Aquista 120 Wide Angle

Aquista 100/67 wide Angle Aquista 100/52 wide Angle

CONTACT US

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SUPPORT BBFSF AND PROTECT THE OCEAN

Make a difference in ocean conservation! Support BBFSF through sponsorship, merchandise purchases, and the opportunity to name sharks. By contributing, you play a vital role in preserving our oceans. Your sponsorship helps fund vital research, conservation efforts, and educational programs. Purchase our eco-friendly merchandise to raise awareness and support habitat restoration. Adopt a shark and give it a meaningful name through our Shark Naming Program. Together, let's protect our oceans for a brighter future.

Visit About Bimini Biological Field Station Foundation (biminisharklab.com) to learn more, take action, and make a lasting impact on ocean conservation!

MARELUX AMBASSADORS / INFLUENCERS



Robert Stansfield Scott Portelli Tai Olayon Settavit Pacharutakasukh Rina Yumol Jones

INON UCL-G100 SD and UCL-G55 SD for GoPro



We are pleased to announce release of new version of underwater close-up lens "UCL-G100 SD" and "UCL-G55 SD" for GoPro cameras.

The UCL-G100 SD provides about double magnification comparing to the UCL-G165II and the UCL-G55 SD further double up the magnification.

Both lenses come with unique focusing aid feature "Focus Stick (PAT.P)" that shows minimum focusing distance (UCL-G100 SD) or depth of field (UCL-G55 SD).

The Focus Stick is visual reference of minimum focusing distance/depth of field to avoid blur video of tiny subject.

It can be flip up or install on the lens barrel vertically according to various shooting conditions.

Optional Focus Stick for UCL-G165II will be released at the same time as well.

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Ikelite 200DL housing for Sony a9 III

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No other manufacturer makes professional functionality so accessible. Our housings are designed from the ground up to provide full camera control and connection for external strobe lighting out of the box. Advanced features including TTL lighting exposure and enhanced magnifying viewfinders are available as needed.

Our DL-series lens ports are optimized to be the lightest on the market with superb image quality. The materials chosen for our housings and lens ports are chosen to maximize durability and corrosion resistance while minimizing travel weight and cost.

Controls are provided for all camera functions except: Diopter adjustment; Joystick up/down/left/right (Joystick can be depressed), Control wheel; Control wheel



functions may be accessed using the Front and Rear Dials.

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Nauticam Fisheye Conversion Port (FCP)

If you followed DivePhotoGuide's DEMA exploits last year, you will have seen them chatting with Nauticam about their latest water-contact optic, the Fisheye Conversion Port, or FCP-1.

While it's yet to be officially released, we can get a better idea about this much-hyped lens from the latest information on the Nauticam website.

Like other water-contact optics in the Nauticam range, such as the WACP-1 and WACP-2, the new FCP-1 is designed to convert the field of view of your attached lens to that of a fisheye lens.

As detailed in Nauticam's port chart, the FCP works with zoom lenses that are 28mm at their widest and allows for the full zoom range to be used.

Suitable lenses include the Sony FE 28–60mm f/4–5.6, Canon RF 24–50mm f/4.5–6.3 and Nikon Z 24–50mm f/4–6.3. There is also the option of creating a circular fisheye if the FCP is used with super-wide lenses. For example, according to Nauticam, the Sony FE 14mm f/1.8, Canon RF 14–



35mm f/4 and Nikon Z 14–30mm f/4 all produce a circular fisheye at 14mm.

Featuring an integrated float collar and removable shade, the FCP is compatible with both N120 and N100 port mounts.

Buoyancy in water: Negative 0.4kg / 0.9lbs

Depth Rating: 100m / 330ft

www.divephotoguide.com
www.nauticam.com

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Marelux Aqista series wide angle wet lenses



Aqista 90 Wide Angle Wet Lens

Marelux Aqista series wide angle wet lens is a lens accessory specifically designed for underwater photography. Every Aqista lens is made of high-quality optical glass, with excellent waterproof performance and durability. The main function of the Aqista wide angle wet lens is to convert the focal length of the camera's original lens into a wider angle of view.

The Aqista series wide angle wet lens consists of three models, Aqista 90, 100 and 120.

The Aqista 90 lens is used for GoPro sports cameras, expanding the field of view to 140 degrees underwater.

The Aqista 100 and Aqista 120 lenses are designed for lenses with an equivalent full-frame focal length of 28mm. Underwater, the Aqista 100 can increase the field of view to 120 degrees, while the Aqista 120 can increase it to 130 degrees. They can



Aqista 100 Wide Angle Wet Lens



Aqista 120 Wide Angle Wet Lens

also correct aberrations caused by water and improve the resolution.

This lens accessory is usually suitable for underwater photography situations where large scenes and subjects need to be captured.

If you are a photographer who loves underwater photography, consider purchasing an Aqista wet wide lens to take your work to the next level.

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Issue 137/22

Nauticam NA-A9III for Sony a9 III for pre order

Preorder the Nauticam NA-A9III Housing now!

The NA-A9III underwater housing provides unfettered access to all of the camera's key controls. On the inside, you will see a feat of engineering as access to important controls has been rerouted out to the left and right handles. This makes changing your settings on the fly a breeze allowing you to take full control of the creative process that we enjoy as image creators.

This latest housing for the Sony a9 III is sure to be a reliable tool for the professional and amateur image maker.

Nauticam is continually developing new optical accessories that raise the bar of what is possible in underwater imaging. The unparalleled optical quality of Nauticam's Water Contact optics such as the FCP-1, WACP-1 or WWL-1B which offers up to 170° field-of-view, full zoom through, an almost 0" minimum focus distance with supported lenses. For macro, the SMC-1 and SMC-2 deliver tack-sharp super-macro magnification levels up



to 4x with the Sony 90mm macro lens.

The Nauticam system is temperature compensated, eliminating false alarms caused by a change in outside temperature, or from a camera heating up on an action-packed dive.

Model Number: 17437

Port Opening: N120

Depth Rating: 100m

www.nauticam.com



Nauticam NA-R5C housing for Canon R5 C



"Cinema Mastery"

The excellent Canon R5 has lots of fans, but serious video shooters sometimes felt a bit throttled by the built-in limitations of that camera. Canon's answer is the R5C. All that was great about the R5 has been fully unleashed.

You get Canon best-in-class white balance and AF and simply stunning image quality. Nauticam rose to the challenge with exceptionally elegant engineering incorporating full cinema zoom and focus in a compact form factor that inspires confidence from the very first use. Underwater cinema work has never been this easy.

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Isotta housing for OM SYSTEM OM-1

This is an ergonomic underwater housing for OM System OM-1 camera. This housing is made of aluminum what stands for high quality, solidity and reliability. In this underwater housing and the necessary lens port (optional) you can take the most beautiful underwater images up to a depth of 100 meters.

Functions that can be operated:

- ON/OFF lever of the OM System OM-1
- Ergonomic camera focusing and shutter lever, easy to use with gloves
- Lens release lever
- Front dial
- +/- button (Exposure compensation)
- Mode dial lock button
- AF/metering mode button
- Sequential shooting/self-timer/ flash button
- ZOOM gear;
- Port safety lever
- Movie button (REC)
- AF-ON button
- Rear dial
- Mode dial
- Menu button
- AEL button
- Arrow pad
- Playback button
- OK button
- One-touch white balance button
- FN lever
- Externa flash ON/OFF lever
- INFO button
- Erase button
- ISO button
- Multi selector button

Specifications of this OM-1 underwater housing:

- Two fiber optic connections



standard (to use the flash needs an optional trigger);

- Three M16 holes and one M24 for installation of accessories
- Back housing completely detachable from the front housing;
- Tray with lock for the easy insertion of the camera;
- Single-hand closing knob for the back of the housing;
- Aluminum buttons and dials with engraved symbols identical to camera controls;
- Double O-Ring seals on all buttons and removable parts;
- Sizes (LxHxP): 285.2x192.7x120.6;
- Depth rated to 100 metres;

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Nauticam NA-A1 housing for Sony a1



“Do-Everything Powerhouse”

Sony has reconceived what a pro camera should look and feel like with the Sony a1.

Sony maintained the form factor of the A7 series, but loaded it with state-of-the-art technology that provides superior stills and video performance. 4K 120p, 8K Video, 50MP @ 30FPS, 9M dot EVF and more breaks new ground in this class. If you can dream it, the a1 can do it.

Married to the Nauticam NA-a1 housing with its superior ergonomics, the underwater possibilities are near limitless.

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GoPro Hero12 Black

The best HERO camera we've ever made — HERO12 Black takes GoPro's best-in-class image quality to the next level with new HDR (High Dynamic Range) 5.3K and 4K video, upgraded HyperSmooth 6.0 video stabilization and an industry-leading 177° field-of-view with Max Lens Mod 2.0.

Other new features include a totally redesigned power management system for improved thermal performance and up to 2x longer runtimes¹, and Bluetooth audio support for Apple AirPods and other headphones to record sound and give remote voice commands. There are also pro-level features like wirelessly synchronizing multiple HERO12s via timecode, advanced color controls, and more.

HERO12 wraps all of this into GoPro's legendary waterproof, ultra-rugged design to ensure you get the shot, no matter the environment.

HDR (High Dynamic Range) Video + Photo for more vivid images

Longer runtimes, including 1.5 hours at 5.3K30 and over 2.5 hours at 1080p30²

Optional Max Lens Mod 2.0 lens accessory enables ultra wide angle, 177-degree field of view in 4K60



New Bluetooth audio support for AirPods + other Bluetooth audio devices for wireless sound recording and voice control

5.3K60, 4K120 and 2.7K240 video resolutions

HyperSmooth 6.0 video stabilization with 360° Horizon Lock³

Large image sensor captures ultra wide 156° field of view in 8:7 27 megapixel photos with 24.7 megapixel stills from video

Waterproof to 33ft + legendary GoPro ruggedness

New Timecode Sync to wirelessly synchronize multiple HERO12 Black cameras at once

GP-Log and LUT support

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Nauticam NA-Z8 for Nikon Z8



"Z9 Performance in a Z7 Body"

Every few years Nikon manages to hit a home run with a camera that just does everything better than seems possible.

The Z8 is that camera and more.

46MP/30FPS/
4K 120P/8K 60P/N-RAW 12-Bit/
ProRes RAW 12-Bit.

Lightning fast customizable AF for stills & best ever Live AF. Nauticam has met the challenge by crafting a new level of its legendary ergonomics into the NA-Z8 housing.

Nauticam and Nikon; bringing underwater imaging to a new standard.

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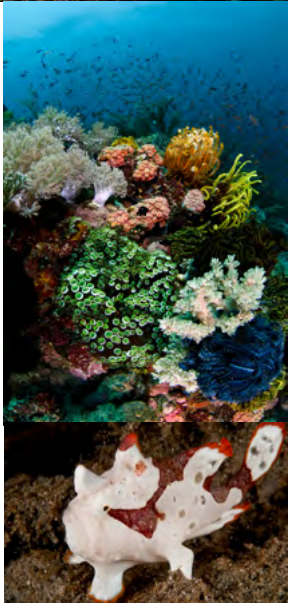
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Join us May 11-18, 2024 for a photo & video workshop held at Anilao's most beautiful resort.

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Learn the fundamentals of underwater photography and progress to the latest, most innovative techniques taught by the top pros in the industry

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Discover the world of underwater imaging through compelling features from photographers, filmmakers, ocean scientists, industry experts, and more

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Read about the experiences of accomplished shooters as they visit the world's most iconic dive spots, and get inside tips on maximizing your dive vacation

EQUIPMENT

Use our comprehensive underwater photography and videography gear guide to find the best camera, lenses, housing, lighting, and accessories for you

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Submit your best underwater images and short films to our annual contests, including the prestigious DPG Masters Underwater Imaging Competition

DIVE PHOTO GUIDE

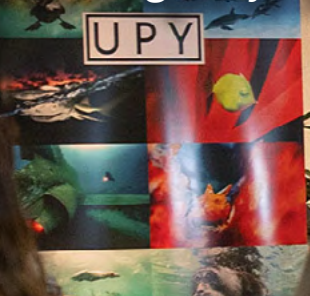
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UPY Awards Evening 2024

London

by Alex Mustard

All images by Saeed Rashid



The 2024 Underwater Photographer of the Year awards were announced at a special awards evening in Mayfair, London. Alex Mustard, chair of the UPY jury, presented the awards on stage, with winners travelling to London from as far away as Brazil.

Although UPY's history stretches back to 1965, this was the 10th edition of the modern awards, and the event celebrated this rich history. "A real highlight was fortuitously having five of our UPYs [Underwater Photographer of the Year overall winners] attending," commented Alex Mustard. "Alex was obvious just crowned, and Tobi is a judge, but Rafa, Kat and Nuno were all category winners again this year. It was also great to see an even split between the sexes – with the boys and girls each claiming 6 of our 12 categories. Although female photographers edged it with the big awards, 3 to 2."

"Although the UPY Awards Evening was instigated to celebrate the 10 year anniversary, its popularity means that we plan for it to become a regular event. There are very few such socials that allow top photographers to come together with the only obligation of building friendships and exchanging ideas and information. And most of the well-lubricated audience headed out in London's West End for a memorable after-party."

The event was hosted by long-time UPY sponsors The Crown Estate at their prestigious property One Heddon Street, London W1.



Kirsty Andrews wins the British Waters Living Together category, sponsored by The Crown Estate.



Kat Zhou UPY 2023, announces her successor as overall winner



Martin Broen was category winner for Wrecks



Nick More for BUPY announces the winner of the British Underwater Photographer of the Year.



Rafael Fernandez Caballero winner of the Behaviour and Portraits categories



Alex Dawson receives the overall title of Underwater Photographer of the Year, 2024.



Sandra Stalker was named Most Promising British Underwater Photographer, 2024.



*Kirsty Andrews with
Chelsea Bradbury of
The Crown Estate.*



*Alex Dawson UPY 2024 and
Jenny Stock BUPY 2024.*

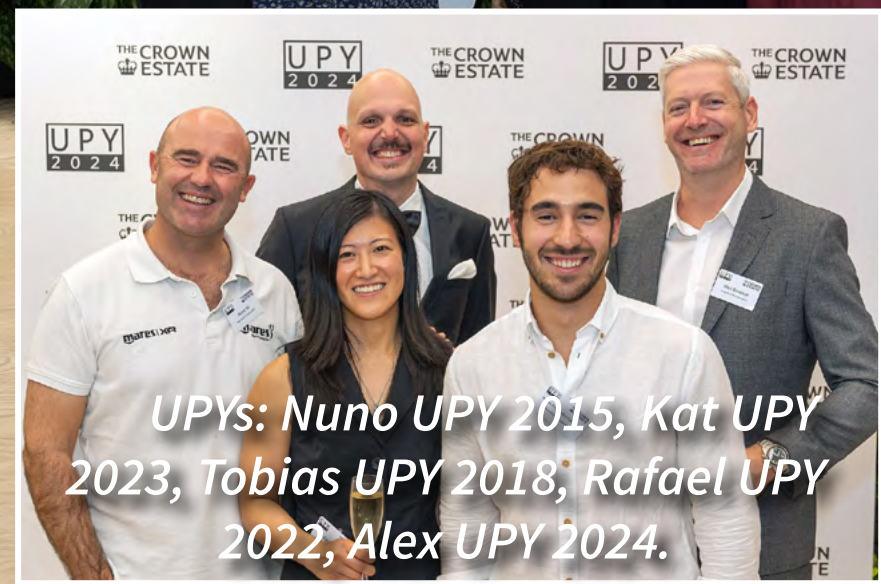


UPY
2024
Awards
Ceremony

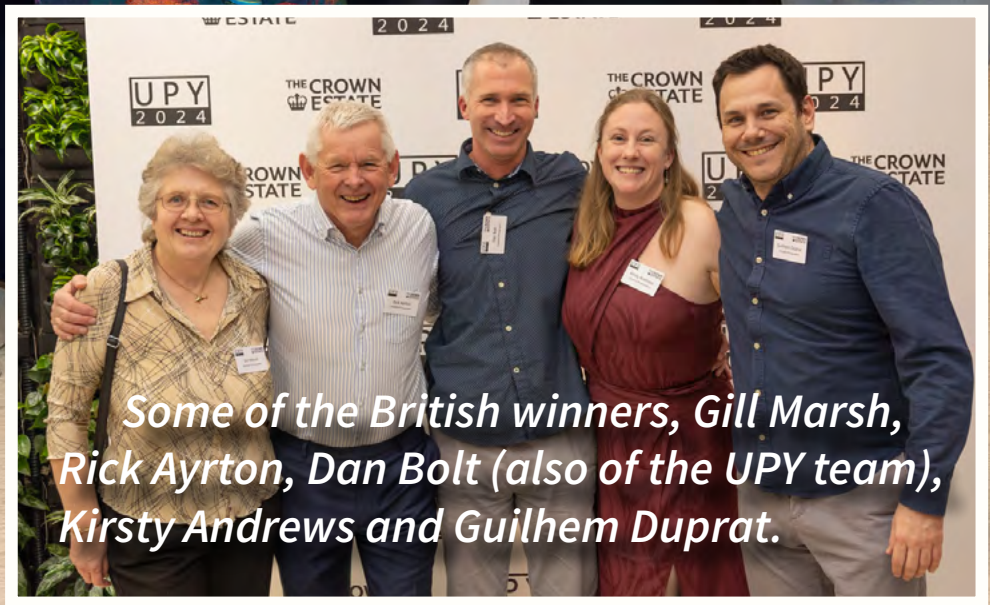
*Nuno Sa was named
Marine Conservation Photographer of the Year,
sponsored by
The Save Our Seas Foundation.*



Some of UPY 2024 winning female photographers and members of the Mustard family



UPYs: Nuno UPY 2015, Kat UPY 2023, Tobias UPY 2018, Rafael UPY 2022, Alex UPY 2024.



Some of the British winners, Gill Marsh, Rick Ayrton, Dan Bolt (also of the UPY team), Kirsty Andrews and Guilhem Duprat.

Don't settle for 2nd best



Film - No Filter No White Balance



Digital - No Filter Manual White Balance



Magic Filter Manual White Balance

Digital cameras have opened up new possibilities to underwater photographers. For available light photography manual white balance is an invaluable tool for restoring colours. But when you use it without a filter you are not making the most of the technique. You're doing all the hard work without reaping the full rewards. These three photos are all taken of the same wreck in the Red Sea. The left hand image was taken on slide film, which rendered the scene completely blue. The middle image is taken with a digital SLR without a filter; using manual white balance. The white balance has brought out some of the colour of the wreck, but it has also sucked all the blue out of the water behind the wreck, making it almost grey. The right hand image is taken with the same digital camera and lens, but this time using an original Magic Filter. The filter attenuates blue light meaning that the colours of the wreck are brought out and it stands out from the background water, which is recorded as an accurate blue.

A Year with OM Systems OM1 and an AOI UH-OM1 housing

by Andrew McLachlan

While living in Ontario, Canada I became a seasoned, topside, nature photographer. I dabbled in underwater photography using an Ewa Marine flexible housing for my Nikons with bullfrogs and snapping turtles during summer months in a wetland near our family cottage.

In 2022 I made a switch to a Micro Four Thirds format with Olympus / OM System and the feature laden OM-1 breathed new life into my photography.

The following year plans to relocate to Grand Cayman were on the horizon and a journey into photographing the mesmerizing realms of the underwater world had begun.

As I researched options to take my OM-1 camera beneath the surface I decided on products available from AOI. The contenders in my decision making were Nauticam, Ikelite, and AOI.

Nauticam was naturally the high-end contender but also far from my financial budget. This led me to weigh the options between Ikelite and AOI. I opted to purchase the AOI UH-OM1

Housing.

This housing is only slightly bigger than the camera itself and offers features and functionality that allow me to make the most of the OM-1 underwater. It is not only very affordable, but comes with a built-in vacuum analyzation and Wet Detection System (VWS) that continuously monitors the pressure to provide ample warning of potential leak issues.

The housing also includes, as standard, a built-in flash trigger that is RC compatible. Vacuum systems and flash triggers are add-on options for both Nauticam and Ikelite.

The UH-OM1 housing allows access to all the buttons on the OM-1 camera with the exception of the mutli-selector joystick or the two custom buttons on the front of the camera. This is by no means a hindrance whatsoever as I simply assigned custom functions to other buttons that are accessible through the housing allowing me to effortlessly change various settings and move focus points accordingly while beneath the waves.



Green Sea Turtle photographed at Spotts Beach using the OM1 and M. Zuiko 8mm Fisheye Lens in my AOI UH-OM1 housing with dual AOI Q1-RC Strobes set to RC TTL ISO 200, f8 @ 1/250 sec.



8mm wide angle set up

The AOI UH-OM1 housing is made from injection moulded polycarbonate and is rated to 45 meters (147 feet) that is perfect for my needs as I spend most of my dives in the 30–60-foot range.

I am new to scuba diving having recently completed my refresher course and completed 20 dives here on Grand Cayman thus far. I do spend a lot of time snorkeling for photography and can easily descend to 10-15 feet to photograph marine life and reefscaapes when needed.

The UH-OM1 housing uses the AOI / Olympus PEN Port System, and an excellent assortment of lens ports are available for many of the M. Zuiko lenses.

Choosing a housing that supports the lenses you plan to use for underwater photography is crucial. I am currently using the DLP-06 port for the



A large female Southern Stingray being followed by Bar Jacks at the sandbar in North Sound on Grand Cayman photographed using the OM1 and M. Zuiko 8mm Fisheye lens in an AOI UH-OM1 housing with available light. ISO 500, f5.6 @ 1/640 sec.

M. Zuiko 8mm Fisheye Lens, the FLP-08 lens port for my M. Zuiko 7-14mm lens, and the FLP-02 Flat Port for my M. Zuiko 60mm Macro lens.

Most often I use the M. Zuiko 7-14mm and M. Zuiko 8mm Fisheye lenses for shallow water available light imagery with the latter being favored

over its smaller size and easier handling underwater given the small 4" dome port when compared to the 8" dome port for the M. Zuiko 7-14mm lens.

When I add my dual AOI Q1-RC Strobes (more on these later) to my fisheye or macro set-up I use two StiX adjustable buoyancy floats on each strobe



60mm macro set up

arm which leaves the rig slightly negative in the water. It is comfortable but not perfect. I plan to add one more float to each strobe arm to improve the buoyancy slightly.

As mentioned earlier the UH-OM1 housing comes with a built-in LED flash trigger, which is compatible with both manual flash trigger and the Olympus RC Mode. The built-in Vacuum Analysis and Wet Detection System is powered by a built-in rechargeable lithium polymer battery that is charged by a USB-C charging port. The battery takes roughly 1.5 hours to be fully charged and is good for approximately 4 days (based on 3 one hour dives per day).

The controls and accessibility on the housing provide me with easy access to essential camera controls, buttons, and settings and allow for smooth operation of functions like shutter release, focus, and zooming of my M. Zuiko 7-14mm lens when it is in use.

Standard accessories included with the UH-OM1 housing are body cap, USB-C charging cable, LCD monitor hood, spare O-ring for vacuum valve protection cap, vacuum pump, spare main O-ring,



Christmas Tree Worms photographed using the OM1 and M. Zuiko 60mm Macro Lens in an AOI UH-OM1 housing with dual AOI Q1-RC Strobes set to RC TTL. ISO 200, f8 @ 1/250 sec.

spare secondary seal ring, silicone grease, silica gel, O-ring remover, and hot shoe connector.

For lighting I am using dual AOI Q1-RC Strobes. These are very compact in design with an underwater weight of 90 grams including batteries.

They have a guide number of 22, color temperature of 5,600K, and a beam angle of 85

degrees. A diffuser is included as standard gear with the strobes, but an optional dome diffuser (AOI SD-02) is available that increases the beam angle of the strobes to 110 degrees.

I find these compact strobes perfect for my macro and close focus wide angle requirements. The Q1-RC Strobe has three settings, RC, i-M,



and Manual. The RC mode syncs beautifully with the RC setting on the OM-1 for perfect TTL functionality. At this point in time this is my preferred go to setting. The i-M mode is essentially a TTL setting for more extreme macro photography and the Manual mode allows the photographer full creative control over the light output with 6 different light output settings for creative lighting techniques.

I have yet to photograph wide reef scenes at depth with the Q1-RC Strobes so I cannot effectively advise on this aspect of underwater photography.

After using OM System gear underwater since December 2023 I have not regretted my switch from Nikon for a nanosecond. My camera bag dropped by 15lbs because of the switch.

The micro four thirds format for mirrorless systems already has a well-established line up of lenses under the

M. Zuiko designation. M.Zuiko lenses are known for their optical quality, producing sharp and clear images. I purchased many of my M. Zuiko lenses used to save on the cost of switching camera systems.

I am very fond of the OM-1's tracking and animal eye detect system. It is very effective but will get fooled by subjects with noticeable eyespot markings as most eye detect systems will since algorithms used in these AF tracking modes looks for specific contrasts that might resemble an eye.

The OM-1's Underwater White Balance setting is a great feature for creating imagery with available light. I find it reminiscent of using the Magic Filter with my Nikons. I do hope to use my M. Zuiko 8-25mm lens underwater soon and will run a comparison of the Magic Filter vs the OM-1 Underwater White Balance Setting when I do.

By a longshot I find my very favorite set-up to use beneath the



waves is the M. Zuiko 8mm fisheye lens in the DLP-06 4" dome port with available light. I find the close focusing capabilities of the lens inside the small dome to be incredibly versatile for much of my photography. I can photograph frame filling images of Green Turtles at point blank range, split images (yes, splits with a 4" dome) of shallow reef scenes, and stingrays at the sandbar on Grand Cayman.

I also enjoy taking it to depth with dual Q1-RC strobes for close focus wide angle scenes of sponges,

anemones, and corals.

I typically use the OM-1 in Live View mode while underwater rather than the viewfinder. I find this technique to be a little easier for me to work with. I own and occasionally use AOI's specially designed UMG-05 LCD 90-degree viewer that fits over the LCD screen area on the UH-OM1 housing but I do prefer to simply view the LCD screen through the housing as I can easily contort the housing to frame various subjects and still see the image I am composing.

One nice aspect of the UMG-05 is



Gorgonian and sun rays at Barefoot Beach on Grand Cayman photographed using available light with the OM1 and M. Zuiko 8mm Fisheye Lens in an AOI UH-OM1 housing. ISO 640, f8 @ 1/800 sec.



Purplemouth Moray Eel portrait photographed at Spotts Beach on Grand Cayman using the OM1 and M. Zuiko 60mm Macro lens in an AOI UH-OM1 housing with dual AOI Q1-RC Strobes set to RC TTL. ISO 200, f8 @ 1/250 sec.

that it can easily be affixed or removed from the housing while underwater, making it useful for the times it may be required and removed for those moments where it isn't necessary.

One of the main attractive features that resulted in my switch to OM System and the OM-1 body was size. The camera and lenses are physically smaller in size and generally less expensive than the full frame camera alternatives. This also

means that housings and lens ports are smaller in size and also less costly than those of the full frame options.

The sensor on the OM-1 is a 20-megapixel sensor that is about half the size of today's full frame cameras. However, the OM-1 is no slouch. When combined with the M. Zuiko line of lenses the images captured have excellent detail and by selecting the OM-1's underwater white balance setting the colours look accurate.

The OM-1 also exhibits excellent low light performance as well as auto-focus performance. In fact, the AF / Animal Tracking capabilities of the OM-1 is on par with the best full-frame options available today at one third of the price.

When I am photographing subjects such as sea turtles or stingrays with ambient light the AF tracking is superb. I will often photograph these subjects with the

20-fps setting on the OM-1, but often only in short bursts of 5-10 frames at a time. The OM-1 is also capable of shooting at 50 fps in the ProCap SH2 setting but do keep in mind faster frame rates mean more editing. I also find the AF Animal Tracking very useful when photographing small reef fish such as Sergeant Majors or various Butterflyfish.

While professional cameras and housings are more expensive



A large female Southern Stingray photographed at Spotts Beach on Grand Cayman using the OM1 and M. Zuiko 8mm Fisheye lens in an AOI UH-OM1 housing using available light. ISO 800, f8 @ 1/800



Common Octopus photographed at the entrance to it's home using the OM1 and M. Zuiko 8mm Fisheye lens and available light. ISO 100, f8 @ 1800 sec.



than consumer options, the benefits they provide in terms of image quality, control, and durability make them essential tools for serious underwater photography.

Selecting a camera with excellent image quality, superb low light performance, excellent auto-focus capabilities, full manual control, durability, customization options, white balance control, RAW file format, and have a strong line of superior optics is within reach with the OM System OM-1 camera.

Equally important is a housing that allows the user to operate the camera effortlessly underwater. The AOI UH-OM1 allows me to operate my OM-1s the same way I do for my topside photography.

The past year exploring the underwater world of Grand Cayman has been utterly fascinating. I am looking forward to the coming year as I will

be diving to depth a lot more often for many new experiences and opportunities through the lens.

Underwater photography is a thrilling and rewarding experience, but it does require some specialized equipment to capture stunning imagery. The AOI UH-OM1 housing, lens ports, and strobes may be considered an entry level system, but they certainly offer professional quality at an affordable price point and emerge as a game-changer for those using the Micro Four Thirds format wishing to explore a trove of underwater wonders.

Andrew McLachlan
www.andrewmclachlan.ca

Field Report: Nauticam Fisheye Conversion Port

by Alex Mustard

The FCP-1 or fisheye conversion port is a new lens for underwater photography developed by Nauticam.

The lens is similar to Nauticam's other underwater optics like the WACP or the WWL series of lenses, in that it takes a standard lens on your camera and converts it into a wide angle underwater lens, that is corrected to specifically work in water and therefore delivers superior optical performance. But it is also different from its siblings because this is Nauticam's widest lens - rather than just changing your lens into a 130° wide angle, it converts it into a >170° fisheye, while at the same time allowing you to zoom in. And since most of the angle stretch is in the corners of the frame - when you zoom in you get a double zooming effect, meaning monster versatility!

It is also different because it has been designed to work with a wide variety of lenses, meaning that on many systems you can use it with at least two different lenses. I will come back to that.

The transition to mirrorless cameras, that's currently gripping

our community, has brought many advantages for underwater shooting. However, one frustration is a lack of a mirrorless format fisheye lens.

One of the attractions of the FCP is that it allows fisheye shooting while using a native mirrorless lens, rather than an SLR lens on an adapter. But far more exciting is the FCP is the most flexible underwater lens imaginable, allowing you to photograph a huge variety of wide angle subjects on any dive.

It's hard to convert these things into focal lengths and better to talk in terms of Field of View (FoV). If you are using a 28-70mm, for example, you will at 28mm get a >170° and at 70mm around 60° Field Of View. For comparison, if you used the much loved Tokina 10-17mm fisheye zoom on a crop sensor SLR you undoubtedly loved having a super flexible lens, but that could only zoom in to around 110°, the FCP offers considerably more zoom.

Furthermore, it is the small size of the front element of the FCP, and



Nauticam's new FCP-1 lens

the fact that it allows any lens to focus right to the glass, that greatly enhances how smaller subjects can fill the frame with this setup, compared to other full frame options.

Zooming a wide angle lens allows us to shoot a variety of subjects, but what is not often stressed is how it helps us compose.

A wide angle fisheye gives us fine control over the relative sizes of the foreground and background in our images. For example if we are shooting a coral against a silhouetted reef, and we want the reef a little larger in the frame, we can just back away very slightly and zoom in slightly. The foreground subject stays



The FCP in the field, the production version, top, and the prototype version, bottom, in Raja Ampat

the same size, but because of the slight zooming in, the background is now bigger. And vice versa.

One of the most interesting aspects with the FCP is that it can be used with many different lenses. If you are a Canon R shooter, for example, you can shoot the FCP with the RF 24-50mm (>170-87°), but interestingly you can also shoot it with the 14-35mm.

With the 14-35mm, the lens at 14mm is a circular fisheye, and the port shade is very easily detached mid-dive for shooting circular shots.



The FCP can shoot the biggest scenes. Sony A1, Nauticam housing. Retra Pro Max flashes. 28-60mm with Nauticam FCP-1. 1/160th @ f/13, ISO 400.

Then zoomed in to 28mm is becomes a full frame fisheye, seeing that >170° corner to corner of the frame. And then you can zoom on to 35mm, where it views 122°.

But, and there is a but, the FCP-1 is expensive. Nauticam needed to use two large and expensive aspherical lens elements, made of high refractive index/low dispersion glass in the lens design to get the FCP to work. It means that the FCP-1 is currently listed at close to \$7000 USD.

So what it is like and can this price be justified? The price versus performance equation is very personal, and I won't comment on that but Nauticam do have pretty packed order books, so the equation clearly balances for some.

What I can say is that this is a lens that negates the needs for others. In January I took the production version of the lens on a liveaboard trip in Raja Ampat. I made 26 dives and I used the FCP on 21 of them. I was only tempted to exchange it



At the widest end we can shoot full impact fisheye scenics. Sony A1, Nauticam housing. Retra Pro Max flashes. 28-60mm with Nauticam FCP-1. 1/30th @ f/14, ISO 500.

on night dives and also because I had the recent Nikonos RS-13mm fisheye conversion for Sony to try on the trip too. Without that it might never have come off the camera.

Weighing only slightly more than a 230mm



Zoom allows us to precisely fill the frame with wide angle scenes. Sony A1, Nauticam housing. Retra Pro Max flashes. 28-60mm with Nauticam FCP-1. 1/8th @ f/14, ISO 40

glass dome, the do-it-all FCP-1 will, ironically, be seen both as a money saver (on other lenses) and a weight saver in the luggage.

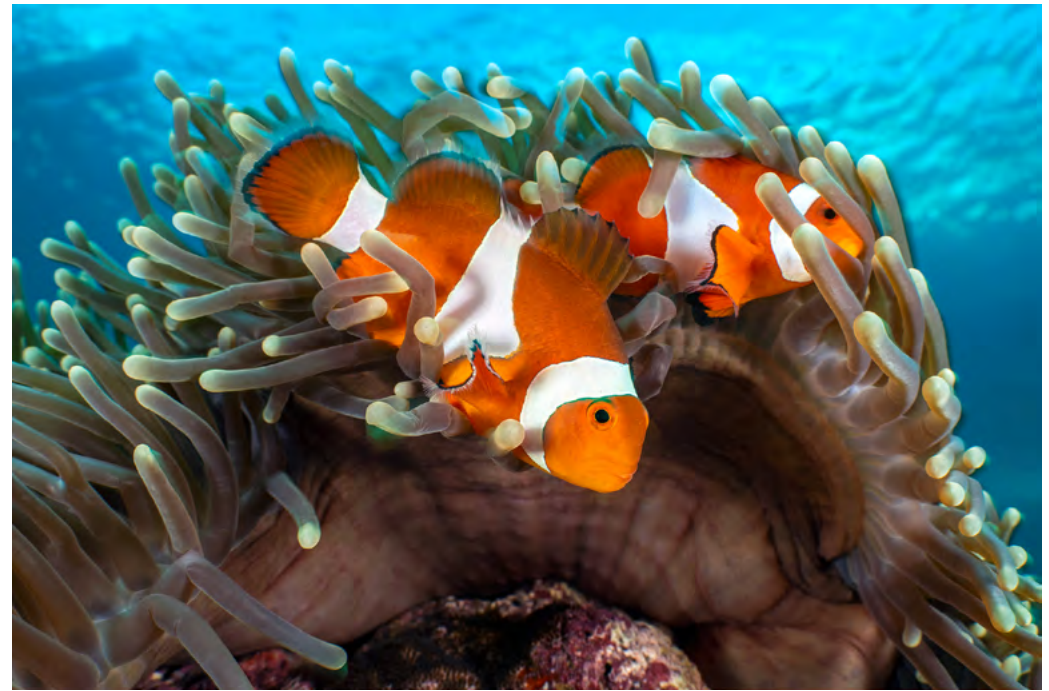
I can also fully understand any photographer feeling the cost is simply not worth it. I think the WACP lenses were more justifiable because as well as offering more zoom range than say a 16-35mm, they also delivered better image quality.

Standard fisheye lenses already have excellent image quality – so the FCP doesn't give such an obvious step forward in this department.

I will leave it to others to write

a full review of the FCP-1 in future issues, because even though I've never been paid by Nauticam, I have been involved in this project from the start. But I will say that I have loaned the FCP prototype to many photographers on my workshops over the last 6 months and everyone just loves this "do-it-all" lens from dive one.

It is just very easy to like because it just does everything you want it to. You start with it zoomed out and when you can't get any closer and fill the frame, you just zoom it in. Despite having the production version, I also



Zoomed in, but not cropped, I was able to shoot this frame filler of anemonefish. Sony A1, Nauticam housing. Scubalamp SUPE D-Pro flashes. 28-60mm with Nauticam FCP-1. 1/160th @ f/13, ISO 320

took the prototype to Raja Ampat and it was taken by photographers on every single dive, such is its appeal!

I've said it before, but it's a great time to be an underwater photographer. We've had the digital revolution in cameras and now we are living through the optical revolution in underwater photography.

The price tag of the FCP-1 means it is clearly not a mass-market product and its requirement for large elements of specialist optical glass means that Nauticam can only build them in

relatively small numbers. But I have been loving having the loaner version on my camera, and if Nauticam are reading this, it appears to be stuck on there!

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OM System 90mm Macro Lens Review

by Martin Stevens

Many people love macro photography for its ability to open up worlds largely hidden to our eyes, and to bring character and emotion to creatures otherwise too small to appreciate.

The OM 90mm macro lens was released in early 2023 to a lot of fanfare. It was an instant hit with many land photographers, and so popular that it was hard to get hold of. Part of the excitement stemmed from some exciting features, in particular the ability to take photos at 2:1 macro.

Being an OM System (formerly Olympus) user I was excited to get my hands on this lens later in the year. I've now had the opportunity to use it both where I live in Cornwall UK, and on a recent macro trip to Anilao, Philippines, and give it a good test in various conditions. It's fair to say I absolutely love it.

Like other Pro lenses in the OM / Olympus line up, the 90mm is robust, feels high quality (even with some plastic aspects), and is weather sealed. It also comes with impressive stabilisation.

Throughout this review I'll make some comparisons with the widely used Olympus 60mm: my go-to macro lens for the last few years, and a staple of many micro four thirds users.

Magnification

I must start with the flagship feature of the 90mm lens, that being the ability to take 2:1 macro, without the need for a diopter. That's also on a cropped sensor, so filling the frame with tiny creatures is easier than ever. I found this a huge

advantage in recent shoots.

With the lens delimiter switch set to the super macro setting (more on this below), I had the flexibility to go from below 1:1 macro, to true macro, and then 2:1 without the need to add extra lenses. It may not be a big deal for some photographers to switch a diopter on or off, but aside from the process of doing that, adding one limits the window where the camera will focus.

With the OM 90mm the camera keeps focusing as you move progressively closer or further away from a subject, allowing great flexibility in magnification and composition, without being limited to fit within a narrow focal window. I've been excited by the results, and obtained a variety of shots with the lens that I would have otherwise missed.

There is little else on the market that can compete with this feature, with most other high magnification lenses being manual focus only. And yes, you

OM 90mm lens next to the Olympus 60mm macro.

Juvenile painted frogfish on the sandy seabed, Anilao Philippines Olympus EM5 Mark III, OM 90mm lens, Exposure 1/250, aperture f/8, ISO 320. Two Sea and Sea YS-D3 MII strobes.





can still add a diopter if you want to go beyond 2:1 macro. Naturally, that gets into the ‘very challenging’ realm of shots because the focal plane is wafer thin. I have only tried this with relatively stationary subjects, like cushion stars, while sitting in a rock pool, with a degree of success, but I can’t say I’ll be wanting or needing to try this often.

Sharpness and Performance

It did not take long for me to appreciate that the 90mm lens is remarkably sharp. In fact, I’ve been

blown away with this aspect of it. Having used the Olympus 60mm for several years it was a lens I’d been largely happy with but never really loved. In fairness, most of the macro photos I take are of very small things, and so I have largely used the 60mm with a diopter. Yet even with a high-grade one like the Nauticam CMC-1 I’ve not always found the results to be especially sharp. The OM 90mm is in a different class. In fact, I can honestly say I have not used a sharper lens for macro.

Focussing is never the easiest thing for any macro lens, but I’ve been



Orange-clubbed sea slug against pink encrusting algae, Cornwall UK. Olympus EM5 Mark III, OM 90mm lens, Exposure 1/250, aperture f/16, ISO 200. Two Sea and Sea YS-D3 MII strobes.

very happy with how the 90mm has performed. This is a lens that can get to 2:1 macro with mostly excellent autofocus. Like all macro lenses it sometimes ‘hunts’, but seemingly no more than the 60mm (in fact, probably less from what I’ve experienced so far), and I found the autofocus to be fast most of the time, even at 2:1. The only times I found the lens struggling was when the water was rich in particles, but that’s a problem for any lens. Like

many other high-end Olympus / OM lenses, there is also a manual macro focus clutch which is excellent for land photography, but something I couldn’t use underwater with my housing.

One of the other features of this lens that makes it useful is the 90mm focal length (180mm full frame equivalent). That, coupled with the lens being longer than the 60mm, means having that bit more working distance, which can be crucial in not



Small cushion star in a rock pool on pink encrusting algae. About 1 cm in size. Cornwall, UK.

Olympus EM5 Mark III, OM 90mm lens, Exposure 1/250, aperture f/9, ISO 200. Two Sea and Sea YS-D3 MII strobes.



Close up of a small cushion star, taken with the 90mm lens and a Nauticam CMC-1 diopter to achieve magnification beyond 2:1. Cornwall, UK.

Olympus EM5 Mark III, OM 90mm lens, Nauticam CMC-1, Exposure 1/250, aperture f/11, ISO 200. Two Sea and Sea YS-D3 MII strobes.

scaring off skittish subjects. I was able to take close-up photos of some subjects that would have disappeared had I been using the 60mm lens and a diopter. The extra distance also means that, for super macro especially, there's a bit more space to get light around and on the subject. On the other hand, for larger subjects the extra working distance may push the diver further back than is ideal.

Bokeh

One of the drawbacks with the Olympus 60mm macro was that the bokeh was rarely particularly attractive. It certainly never made me go 'wow' at any rate. With a diopter it's relatively easy to obtain nice diffused colours, but otherwise I never found lighting or textures to be rendered especially pleasingly.

OM Systems have clearly been

working on this as the 90mm has much improved bokeh. It won't get you anything like the super artistic effects obtained with vintage lenses (few conventional modern lenses can), but there's a marked improvement in the 90mm in creating much more pleasing effects. I found it relatively easy to generate circular or bubble-like bokeh with a variety of out of focus natural patterns. Even highly reflective lines, such as those

on blue-rayed limpets, would produce interesting circles at the right distance and aperture.

Considerations and Limitations

So far, I have been glowing about this lens, but every lens has some issues, surely? On that front, it's hard to avoid mentioning its price.

While the 60mm macro would

set you back about £450 new (with plenty available second hand for less), the 90mm is more than twice that amount (ca. £1100). The lens has seemingly been very popular for OM Systems, and along with the OM-1 body, appears to be one of the major successes since the switch from Olympus to the new company. I could not even get hold of the 90mm for a while as it was always out of stock.

Whether the lens is worth the cost depends on each person, but I've not regretted getting it for a second and the 60mm hasn't even been close to my camera since. If setting up from scratch, then a good diopter would also cost a proportion of the difference too, if 2:1 macro is the aim. As I hope this review conveys though, the difference in quality is very high - the 90mm is streaks ahead in my opinion.

Physicality

In the hand, the most obvious thing about the 90mm is its size - it is much bigger than the 60mm (about 13 cm long versus 8 cm). It's also heavier, at around 450g compared to under 200g. How much of an issue is this?

Personally, this has not been a problem for me, especially not the extra weight which I have barely noticed. It is true that one of the benefits of the micro four thirds



Blue-rayed limpets on kelp, showing bokeh effect of lens on blue stripes.

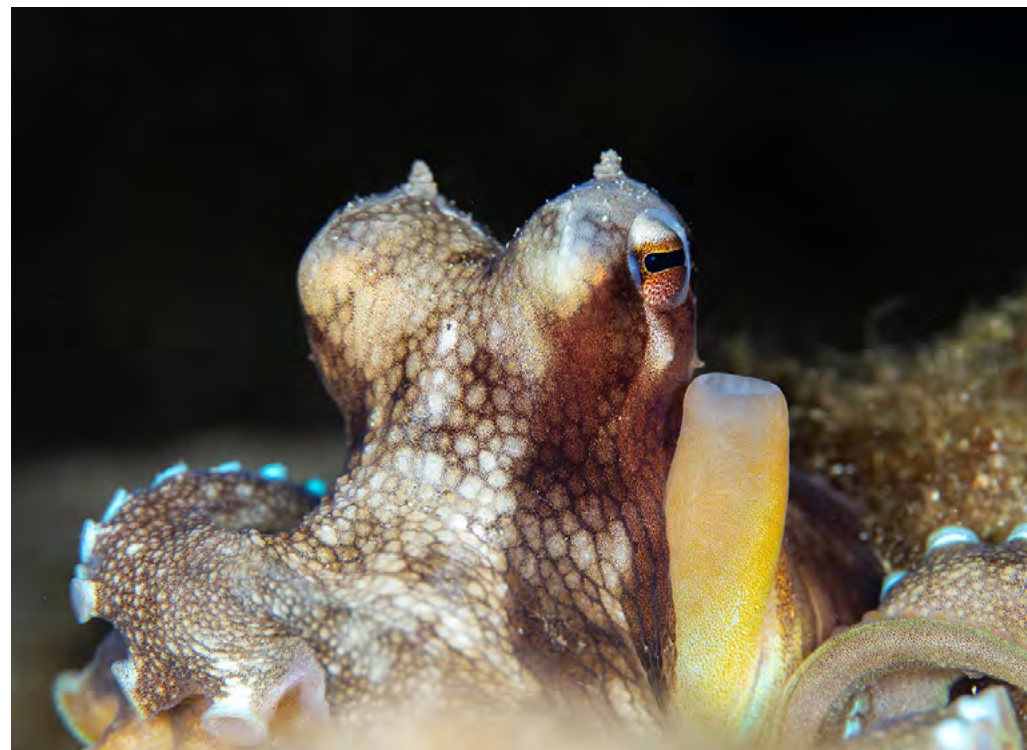
Cornwall, UK.

Olympus EM5 Mark III, OM 90mm lens, Exposure 1/250, aperture f/6.3, ISO 200. Two Sea and Sea YS-D3 MII strobes.

system is the smaller size of the lenses, but I've used this lens locally and taken it across the world from Cornwall to the Philippines and never found the extra size a problem. But unlike the 60mm, it is not a lens you could just stick in a back pocket.

That said, one of the implications of the size increase and design of the 90mm is getting the set up into the underwater housing and ports.

I'm currently an Isotta user and



Coconut octopus on a night dive in Anilao Philippines

Olympus EM5 Mark III, OM 90mm lens, Exposure 1/20, aperture f/7.1, ISO 200. Two Sea and Sea YS-D3 MII strobes.

unfortunately Isotta do not seem to have plans to accommodate this lens with a dedicated port, unless that's changed recently. For me, that mostly meant not being able to access the focus delimiter switch on the lens. Instead, I used a port made for the 60mm macro and added both 30 and 20mm extensions to get the camera and lens to fit, and it is a tight fit. Recently Isotta have updated their port charts and suggest adding some

extra extension beyond this.

I did occasionally have some issues with the aperture dial on my housing not engaging with the camera, but I've always found the aperture dial on my housing sticky so it's possible that is just my housing combined with the improvised set up. Nauticam seem to have been quick off mark and already released a port specifically for the 90mm lens, which allows functionality of things like the



*Coleman's shrimp on fire urchin, Anilao Philippines
Olympus EM5 Mark III, OM 90mm lens, Exposure 1/250,
aperture f/7.1, ISO 200. Two Sea and Sea YS-D3 MII
strobes.*

focus delimiter switch.

There's a couple of other considerations with the 90mm lens. It is marketed as an F3.5 lens, but this drops to F5 when the delimiter is on the super macro setting. The limit of F5 restricts how shallow the depth of field can get, but I never found this a problem. After all, F5 is already pushing it with macro, and with super macro the depth of field is tiny without needing to open up the aperture greatly. Perhaps there were a handful of shots where I might have wanted to experiment with a wider aperture, but I doubt it would have made much difference.

I have mentioned the delimiter switch above, something that controls the distance that the lens will focus and the magnification possible. It's not unusual for macro lenses to have this feature, with the aim being by limiting where the lens is focussing, you can improve performance and



*Red-banded sand perch resting on the substrate,
Anilao Philippines
Olympus EM5 Mark III, OM 90mm lens, 1/250, aperture
f/7.1, ISO 200. Two Sea and Sea YS-D3 MII strobes.*

reduce 'hunting'.

My housing meant I could not change this once the camera was inside. This does occasionally mean not being able to get a shot of something larger when on 'supermacro'. On one occasion in Anilao I managed to flick the delimiter to a wider setting when changing battery between dives and only noticed after descending. Naturally, that was the only dive when we encountered a tiny 'Shaun the sheep' nudibranch on the trip and I was forced into some 'small in frame' shots of it.

Nauticam users (and perhaps some other manufacturers) have the luxury of a port with access to the delimiter switch. That said, I nearly always gravitate to shots in the super macro range anyway. Plus, while the 'supermacro' setting suggests being limited to very small creatures, the setting really allows a greater range than might at first be thought, from something like the size of a portrait of a lizard



fish to the smallest sea slugs.

It is hopefully apparent that I've rarely looked back since getting this lens. There are undoubtedly considerations, perhaps chief among those the jump in price from the 60mm and size, but I'm so impressed as to consider it a game changer for me. I don't mind admitting I have toyed with the idea of saving up for a camera system with a larger sensor of some sort (the scourge of equipment envy...), but this lens has potentially changed my mind. It's the best macro lens I have personally ever used and even if, or when, I do upgrade, I think I would probably continue to use this lens regularly for macro shoots.

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Divevolk SeaTouch 4 review

by Peter Rowlands

Avid readers who are still awake will know that I am a great fan of Smartphones for underwater photography and the iPhone in particular. Way back in Issue UwP112 Christian Baki reviewed the Divevolk SeaTouch Pro 3 and I have one which I have used on a regular basis here in the UK.

I was delighted, therefore, to meet up with the nice folk at Divevolk again in New Orleans in November at the DEMA Show and came away with a SeaTouch 4 Max to review. The form factor and size are very similar but there is a more sensitive gel screen and the construction incorporates much more aluminium to give it an even more reassuring feel.

I use the word 'reassuring' intentionally because I think that is what is needed if you are to entrust your iPhone within this housing. Personally I kind of organise my world around mine and the thought of losing it doesn't bear thinking about. Underwater photographically I decided, and have advised you, to use a previous model iPhone and treat it much more as a dedicated camera while you still have your up to date

model in your pocket ready to take calls etc etc.

I tend to update my iPhone every couple of years and, to be honest, this is usually only if there has been significant camera developments. My trusty old iPhone 11 Pro Max had introduced a 0.5x wide lens which struck me, at 130° coverage as being ideal underwater together with 4k 60fps video so when it was the current model I upgraded to a 13 Pro Max as my phone and kept my 11 Pro Max as a 'camera'.

The SeaTouch 4 Max that I was given was a kit which included a sealed dome port for use in front of any of the iPhone's 3 lenses but would primarily be ideal in front of the 0.5x wide lens. In addition there was a 'red' colour correction filter which, as half of Magic Filters, I was sceptical about but more of that later.

The arrival of the Divevolk SeaTouch 4 and an OM System TG6 meant that I just HAD to go overseas to try them out, especially as it was nearing mid winter here in the UK.

As a result I booked to go to the Red Sea in November with my iPhone 11 Pro Max and was looking forward



to some clear, warm water in which to enjoy the 'fun' of Smartphone/iPhone photography underwater.

In order to experience, and report on, the typical situation which I think most Smartphone users find themselves in, I brought the outfit out unpacked, as most impulsive people might, - pretending to having bought

it as a last minute decision prior to a much anticipated holiday away from the pressures of life and with a new 'toy' to play with. So I opened the nicely packaged and presented Divevolk case in my room at the resort for the first time.

What I was presented with was comprehensive yet simple and



My first Red Sea panorama straight out of the camera. iPhone 11 Pro Max, DiveVolk SeaTouch 4 housing, DiveVolk red filter. 0.5x wide, at F3.4. 1/104th sec. ISO 160

obvious as to how it should be assembled. The backbone is the rectangular adaptor which keeps it in the right position within the housing. Between these two the housing can accommodate the iPhone 6P/7P/8P/XSMAX/14P/15P, iPhone 12/13/14/15 PRO, iPhone 11PROMAX/12/13/14/15 PRO MAX, Samsung S23 Ultra, Samsung S22ultra/S21 Plus, Samsung S21 Ultra/S20 Ultra.

Just to provide an extra bit of firmness for the adaptor sticky side firm neoprene is provided to cut a suitably shaped strip to stick on the inside of the adaptor to help insertion and retention. Nice little touches like this show an attention to detail. To top all of this, and another

excellent attention to detail, there is a professional plaited lanyard/loop handle which looks very classy indeed and works well.

Virtually nothing needs to be adjusted on the iPhone but a good idea is to change the Display & Brightness setting to 'Raise to wake'. This eliminates the need to swipe up which works most times but can be sluggish just when you don't want it to be. The downside is that, underwater, the housing is almost certainly being moved around in the water even when not in use that it will activate the Raise to Wake facility whether you want it or not and could lead to battery drain. In practice I got at least two one hour dives before the phone needed

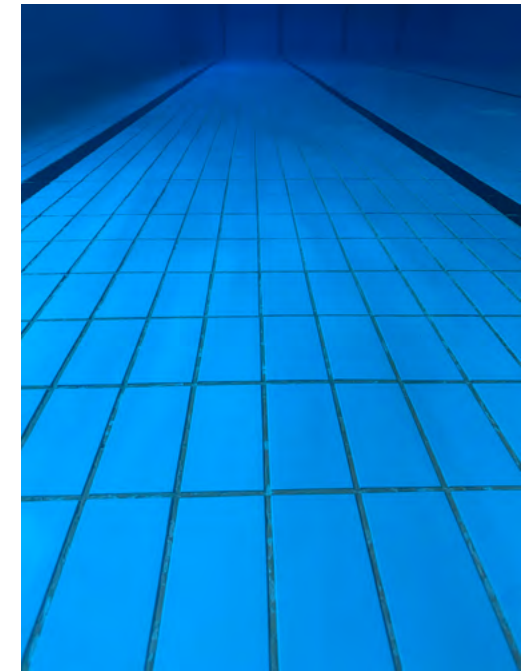


Simple and effective, what we did on our hols pic. Plenty of detail. Phone 11 Pro Max, DiveVolk SeaTouch 4 housing, DiveVolk red filter. 0.1x (26mm), at F1.8. 1/121st sec. ISO 100





The 0.5x wide lens behind a flat port produces images that race off towards the edges but the DiveVolk Dome ports corrects this very successfully. iPhone 11 Pro Max, DiveVolk SeaTouch 4 housing, DiveVolk red filter. 0.5x wide, at F2.4. 1/121st sec. ISO 160



Without a dome and behind a flat port (left), the 13mm 0.5x lens exhibits strong pincushion distortion but with the DiveVolk dome fitted (right) this is eliminated very well indeed.



Be aware that there is a small gap (left) between the filter holder and the housing port which can let in stray light (as in the image above) if the sun is in the wrong position. A short piece of black tape would eliminate this possibility and DiveVolk are working on an accessory solution.

Phone 11 Pro Max, DiveVolk SeaTouch 4 housing, DiveVolk red filter. 0.5x wide, at F2.4. 1/121st sec. ISO 160sec. ISO 160

charging.

Once mounted in the appropriate adaptor the iPhone can be slid into the housing, the rear fold over door closed and retained with two small but sufficient screws to compress the main seal. You are good to go down to 60 metres.

Basically speaking that's the end of the review from the operating point of view for the iPhone can now be used in just the same way as you would on land and I suspect you don't need any help with that. The unique capability of the Divevolk SeaTouch 4

is to allow you to use the iPhone just as you would on land and that's what makes it so exciting and full of future potential.

The membrane screen has been improved to make it more tactile and sensitive and that is certainly true over the SeaTouch 3 so it is very easy to use with no delay.

The ability to use the iPhone just as you would on land is quite revolutionary and, imaging aside, it is available as a mobile communicating device which brings a tremendous safety factor.



Classic Red Sea subjects are a doddle and I have to admit that the red filter did a perfectly acceptable job even though I am half of Magic Filters :-) iPhone 11 Pro Max, DiveVolk SeaTouch 4 housing, DiveVolk red filter. 1x lens (zoomed in to 52mm), at F1.8. 1/122nd sec. ISO 100

For my first dive I was itching to get my hands on the Pano function of the camera. For those not familiar with this capability, the iPhone will record the image as you pan from left to right and stitch it together live to form an instant panorama. The capability is incredibly impressive on the land, and, with a few limitations, equally so underwater. Because Panos are best shot with available light I fitted the 67mm Red filter into the swing holder

and adjusted it to be in front of the 0.5x lens without vignetting.

I can't deny I was like an excited kid in a sweet shop and it wasn't long before Panos were appearing on my screen in no time at all. Like all Panos, even on land, not all of them work for some reason but they cost nothing and take no time at all to reshoot. The results are here for you to see and I'm happy with them in the main but the 0.5x wide lens behind a flat port

produces distracting distortion/fall off towards the edges so that's where the dome port comes into its own and does a really good job at correcting the geometry of the lens coverage underwater. I never got a chance to try this combo until I got back into a tiled pool here in the UK and the results show that this dome does an excellent job (see the illustrations). As a result my next dives here in the UK (or abroad if I'm lucky) will be with the wide dome securely fixed in front of the 0.5x lens for some quality underwater wideangle images and Panoramas.

An iPhone underwater is a bit like Marmite (or Vegemite). You either take to them or not, attracted or repelled. I doubt there's little I can do to persuade the negativity but all I would say is that, if there is a small part of you that is curious despite owning a very capable full frame and 4/3rd, seriously consider it. The housing is hardly expensive at \$229 (nor the housing, dome and red filter kit for \$459) and you most likely already have the iPhone. Take it into a pool and see just how much fun you have. Then it's up to you how seriously you want to take it - and the latest iPhones, photographically, can be taken very seriously both on land and underwater. The Divevolk SeaTouch housings are also designed to grow with you by providing an expanding

range of well thought out accessories including a large dome for split shots and macro lenses for even more exquisite detail.

I rest my case but I'm sure I will be back in future issues of UwP to keep you updated as to more and more of the capabilities and attractions of what is effectively a new genre of underwater photography.

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Paradoxical Blur

by Nick More

The definition of blur.fuzzy, indistinct, unclear.

Here's the rub....this may sound like a paradox...BUT!! My blur shots are anything but blurred. (Stay with me on this).

The antonym of blurred, according to the Oxford languages, can be described as bright, clear, distinct, energised, full of life, illuminated, invigorated, lively. The perfect blend for a paradoxical image.

These shots are visually eye catching and stand out from more conventional images and allow the viewer to discover more in the frame than a simple image, the longer it is studied.

The main subject needs to be pin sharp, especially their eyes. The use of a slow shutter speed is a tool to imply movement and motion or used to create beautiful, dynamic and painterly backgrounds on which we position our protagonist, as we create our image.

Martin Edge taught us base settings of f/8 1/125th sec ISO 200 and be there!! For successful motion blur images, you need to commit to the technique, as it takes practice and honing of skill and your

understanding of light, both natural and artificial. I'd suggest 'jump' settings of f/18 1/8th sec ISO 100. These settings can then be tweaked depending on amount of available light either at the time of day and importantly, your orientation in relation to the sun.

The Theory

Natural light allows us to create blur patterns. Artificial light from our strobes 'freezes' our subject within the frame. Therefore if our strobe light is greater than the ambient light on our subject, then our protagonist will render sharp and the background due to the slow shutter will render

Lion Fish hunting glass fish inside the wreck of the Dunraven, Red Sea, Egypt. Nikon D850, Nauticam Housing, Nikon 28-70 @ 31mm & Nauticam WACP, 2 x Inon Z330 Strobes. F/22 1/2 sec ISO 100. Rear Curtain Sync

Caribbean Reef Shark, Nassau, The Bahamas. Nikon D7200, Tokina 10-17 @ 10mm. Nauticam Housing, 2 x Inon Z240 Strobes. F/18 1/8th ses, ISO 200. Front Curtain Sync. & Accelerated Panning.





Cornish Blue. Nikon D500, Nauticam Housing, Tokina 10-17 @ 10mm, 2 x Inon Z330 Strobes. F/16, 1/8 sec, ISO 100. Front Curtain Sync. & Accelerated Panning.

blurred. Therefore, key to successful motion blur photography is turning your strobes UP! And getting close to our subjects. This way our strobes' light is freezing our subject within the exposure. We then also use our 'curtain' to influence what happens.

When using Front Curtain Sync (FCS) combined with the use of accelerated panning or other 'intentional camera movements', we frame the subject for our intended composition, trigger the shutter and the flash fires. We then pan (move) the camera, slightly faster and in

the same direction as the subject is swimming. This continued movement of the camera after the flash has fired creates the motion blur effects. The big benefit of FCS is that we are fully in control of our composition.

Rear Curtain sync (RCS) is used when the camera is held stationary allowing the subject to swim through the frame. The flash fires at the end of the exposure. This technique allows the background to be a little sharper but still creating attractive blurring streaks caused by the subjects own movement. The downside to using



Sweetlips School, Raja Ampat, Indonesia. Nikon D500, Nauticam Housing, Tokina 10-17 @ 10mm, 2 x Inon Z330 Strobes. F/16, 1/8 sec, ISO 100. Front Curtain Sync. & Accelerated Panning.

RCS is that we are not fully in control of our composition, as we are relying on our subject to swim where we expect across the frame, so can be unpredictable. These images though, have a more 'natural' feel and render the background with a silky / oily texture that can look very attractive.

Settings: YOU HAVE TO SHOOT IN MANUAL!!

Autofocus - For wide angle, I use continuous AF in combination with

Group-area AF. And for macro I use single Point AF in AF-C normally aimed at the subjects eye. Af is so good on modern cameras that I see no need to use anything else.

Strobes - Should be turned up, even shooting at full power. Remembering that flash must overpower the ambient light to freeze our subject. Strobe diffusers can be removed for extra power and even angled inwards to direct hard light onto the subject. Don't worry! The slow shutter speed and camera movements will render any



*Juvenils Harlequin Sweetlips, Lembeh, Indonesia.
Nikon D850, Nauticam Housing, Nikon 105VR & 2 x Inon Z330 Strobes.
F/18, 1/5 sec, ISO 100. Rear Curtain Sync.*

backscatter blurred and even as attractive 'streaks' across the frame giving an added implication of movement (think Millennium Falcon making the jump into hyperspace).

Aperture - as we are using such slow shutter speeds, we need to compensate for over-exposure by closing our aperture. This also has the effect of controlling our high power flash and also giving us good depth of field.

Shutter Speed - We can set our shutter speed anywhere from 1/15th sec to as slow as we can with

overexposing or rendering the entire image too blurry. The shutter speed is dependant on the amount of ambient light ie. the darker it is, the slower we can go but also the subject. Generally for motion blur sharks 1/8th sec is just perfect. For macro subjects, such as juv. Harlequin sweetlips 0.5 sec exposures can give fantastic blur trails in combination with RCS.

ISO - With modern camera we can use ISO to control our exposure. Again depending on the available light this can range from anywhere between ISO200 to ISO LOW(50)



*Oceanic White-Tip Shark, Big Brother Island, Red Sea, Egypt.
Nikon D500, Nauticam Housing, Tokina 10-17 @ 11.5mm, 2 x Inon Z330 Strobes. F/18,
1/8 sec, ISO 50. Front Curtain Sync. & Accelerated Panning.*

ND Filters - Shooting in bright conditions - can be tricky BUT the use of gel ND filters behind our fisheye lenses and the use of 67mm threaded ND filters on the front of our macro ports can control the excessive ambient light.

An example, is shooting the Oceanic white-tip Sharks in the southern Red Sea. These sharks typically swim at the surface and of course its always sunny in Egypt. The use of ND4 gel filter behind my fisheye lens allowed me to shoot these unique images of the OWT's, even

with the camera facing directly into the sun.

Subject Selection - The use of blur / slow-shutter should be justified, not just because we can or as a gimmick. We are using blur to add motion and dynamism to our pictures and to frame our subject to create operation from otherwise distracting and ugly backgrounds

Sharks are the obvious choice as they are themselves dynamic, mobile and dramatic, but not all subjects suit motion blur images. The contradiction is breaking the rules, which often



Razor fish. Nikon D850, Nauticam Housing, Nikon 60mm micro, 2 x Inon Z330 Strobes. F/18 1/8 sec ISO 100. Rear Curtain Sync

gives unexpected results creating arty, beautiful and uniquely eye-catching images. But it can be very hit and miss and the pictures can split opinion - such as this blue spotted stingray image taken in the Red Sea.

Schools of fish are also fantastic subjects, especially when tightly packed together. The effect helps to frame the fish, framing the school and isolating them from the background and so, giving power to the school.

The use of a slow shutter can also be used to create abstract images, such as swirls & zoom blurs. We use similar settings in combination with

FCS and rotate the camera create swirls of using a zoom lens and zooming the lens during the exposure to create zoom blur images.

Backgrounds - In my early years of shooting motion images, I would be looking to place subjects against clear water and creating blur streaks form the subject. These days, I'm in search of backgrounds, these can include sand, reef and even boats.

But my favourite background for wide-angle image is the surface and light/sun. Shooting up at the surface, usually using an ND filter renders the surface texture in a beautiful and



Blue Spot Stingray Abstract. Red Sea, Egypt. Nikon D500, Nauticam Housing, Nikon 10.5 Fisheye, 2 x Inon Z330 Strobes. F/22, 1/8 sec, ISO 50. Front Curtain Sync. & Accelerated Panning.

dramatic way, often managing to incorporate reflections.

The perfect storm.....successful motion blur images are a combination of subject, background and controlling artificial and ambient light. Sounds familiar? Its really the same principle of any wildlife photography, just using a different skillset to produce unique and standout pictures.

It takes practice and commitment to the technique, but once mastered becomes muscle

memory and is a predictable method of shooting. Give it a go.....

Nick More

www.instagram.com/nickmoreuw

www.facebook.com/nickmore6

Mastering Macro

By Brook Peterson

Macro photography is a favorite pastime of many underwater photographers. For some, it is the underwater macro world that captured their imagination in the first place. There are so many tiny aquatic critters that can be unbelievably beautiful, amazing, interesting, or just plain weird. Sometimes the strangeness defies reason, and we are compelled to show this through our photos to our friends, the land dwellers. I am a firm believer that “Good Things Come in Small Packages.” But how do you create an image with monster impact from a subject with such tiny proportions?

First Things First: Equipment

Without proper equipment we are at a disadvantage to show what we really see. This includes our ability to see the critters in the first place. I recommend a good mask with magnifying lenses. Much of the most beautiful detail may not be visible to us without the use of magnifying lenses. This leads to the use of magnifying lenses for the camera. A good macro lens is a must for any macro photographer. For

DSLR users, I recommend a 50/60mm or 100/105mm macro lens and their equivalent for mirrorless cameras. There are some compact cameras that have excellent macro capability, without the need for additional magnification, such as the OM TG-6.

In addition to the camera and housing, there are wet lenses that can enhance your ability to photograph the tiniest animals. I recommend Nauticam’s SMC or CMC diopter, but there are many brands of diopters that can be mounted to the camera’s housing. A diopter is basically a strong magnifying lens that allows you to photograph subjects much closer.

What makes a good photo great?

All good photos have three things in common; good or creative lighting, interesting composition, and they tell a story or show a behavior. These are the things you should be thinking of when making images. Be careful that you don’t fall into the trap of taking identification photos just to prove you saw something. It can be very exciting to see your first blue ring octopus and you may want to prove



Nikon D850 in a Nauticam housing with Retra Pro Strobes. 105mm micro Nikkor. 1/250th @ F18. ISO 320. Manual exposure.

it. So go ahead and take that ID shot, but then concentrate on making a beautiful image. Is there something you can do to isolate the subject from its background? Would it look better from a different angle? Is the subject “doing” something? i.e. hunting, mating, brooding, feeding, hiding?

Creative Lighting

The use of light is probably the most extensive and important aspect of art in any form but is especially



In addition to the camera and housing, there are some wet lenses that can enhance your ability to photograph the tiniest animals. I recommend Nauticam’s SMC or CMC diopter, but there are many brands of diopters that can be mounted to the camera’s housing. A diopter is basically a thick magnifying lens that allows you to photograph a subject at a greater than 1:1 ratio.



All good photos have three things in common; good or creative lighting, interesting composition, and they tell a story or show a behavior. These are the things you should be thinking of when making images. Nikon D850 in a Nauticam housing with Retra Pro Strobes. 105mm micro Nikkor. 1/160th @ F18. ISO 100. Manual exposure.

important in macro photography. Light and the lack of light is often used in a photograph to isolate a subject from its environment.

For example, a subject that is lit will stand out from a background that is not lit. This can be accomplished by angling the strobes so that the edge of the strobe light falls on the subject, but not on the background.

Light spreads out from your strobes in the shape of a cone, so if your strobes are turned toward your camera housing, you can use just the outer edge of the light to brush the front of your subject, without lighting the area behind it. This can also be accomplished with one strobe. Place it above the subject and angle it back toward the camera.

Another great way to isolate a subject is with a snoot. A snoot reduces the angle of light so that the

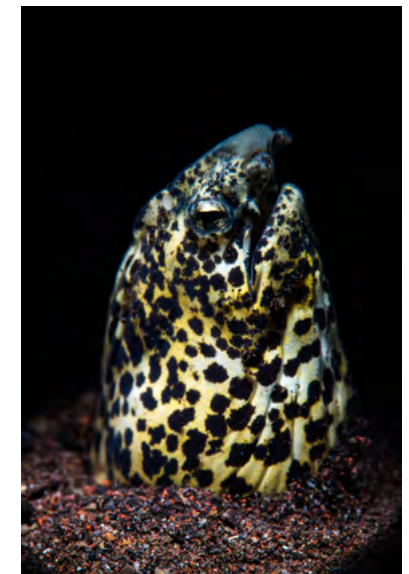
only thing illuminated is the subject itself. You can also use the fish's own shadow to help it "pop" out from its background. Use just one strobe from the side to cast a shadow that isolates its host.

Sometimes, just blurring the background by using a shallow depth of field is enough to isolate a subject. The point is, to think before you shoot so that your subject is the first thing someone sees when they look at your image.

Interesting Composition

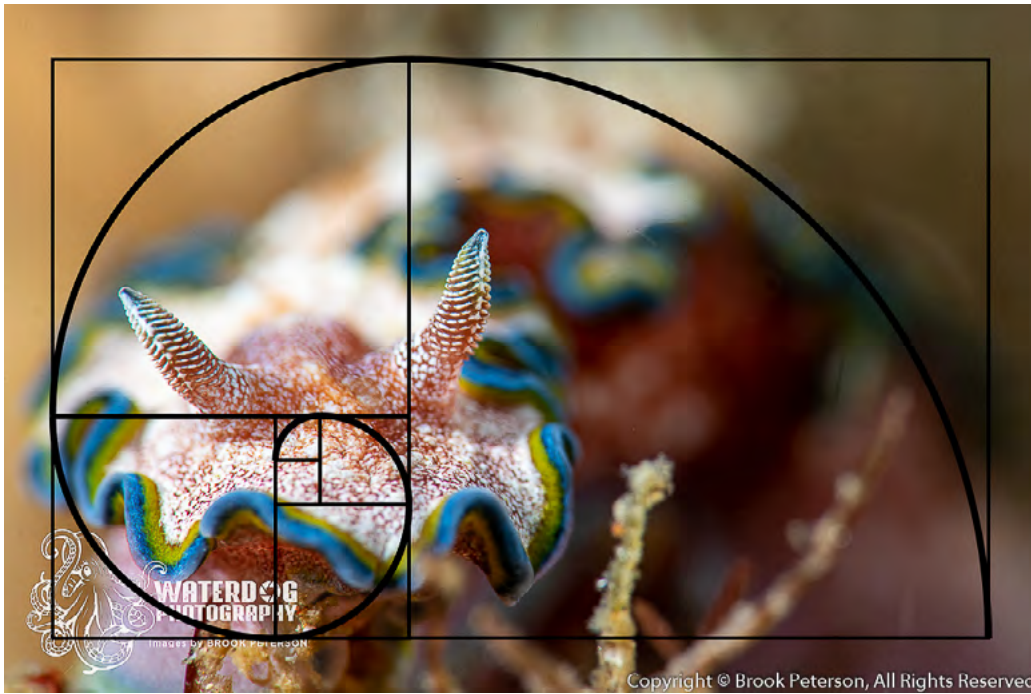
What is it that makes an interesting composition? Is it following composition rules, such as the rule of thirds, the golden spiral, diagonal composition, "s" curve and others? Is it framing the subject? What about leading lines? Using negative

Take a look at how the snake eel pops out from its environment when lit using a snoot (below) as opposed to two strobes (right).



space? How about camera position relative to the subject? The answer to all of these questions is yes.

That being said, it is important to note that the "rules" we use to govern our idea of good composition came after the fact. In other words, the world's greatest artists created what was in



their mind's eye first, and then several hundred years later, theorists devised "rules" to explain why the composition feels so good to modern viewers. You should listen to your instincts when composing an image but keep the theory of composition in the back of your mind to help you along.

Tell a Story

My father was a professional landscape photographer. When I began taking underwater images, he told me that the images I make should first be created in my mind, then with the camera.

At first, I was baffled because I thought there would be no way to predict how a sea animal might behave. It turns out, sea life is very predictable. The little critters can be found in their own distinctive habitats. Some of them yawn, all of them are trying to eat and reproduce and some of them are trying to disappear from sight.

The point is, I can predict a behavior, imagine the result I want, and then go diving with my very limited bottom time and get the result I want. Each of the following images were pre-imagined. Each took the majority of my bottom time to execute, but each produced the desired result. Learn about your

Nikon D850 in a Nauticam housing with Retra Pro Strobes. 105mm micro Nikkor. 1/250th @ F18. ISO 100. Manual exposure.

subjects, decide on a course of action, then go get a photograph that tells a story.

Macro photography can be one of the more challenging and also one of the most rewarding types of underwater photography. Lighting, composition and action are some basic techniques that you can develop to improve your images. Remember that art is something that provokes an emotional response in the beholder and you want your images to bring out that response in your viewers.

Keep this in mind, and your

photographs will become beautiful works of art that tell the stories of the tiniest life in the sea.

Brook Peterson

www.waterdogphotography.com



UC-71 survey

by Jonathan Watson
University of Dundee

Dundee divers shed new light on submarine's final moments

Published on 7 December 2023

After more than a century on the seabed, the secrets of a German submarine have been revealed in new detail by University of Dundee experts.

UC-71 struck fear into seafarers throughout World War One after sinking more than 60 ships during her reign of terror in the North Sea. However, after meeting her own watery grave in the aftermath of the conflict, questions have remained as to how this killer machine met her fate, including claims that she had been deliberately scuttled.

Utilising world-leading expertise and state of the art technology, Professor Chris Rowland, an expert in the 3D visualisation of underwater environments at Dundee's Duncan of Jordanstone College of Art & Design, and Professor Kari Hyttinen, an expert in Communication Design, believe they can confirm what happened to the vessel moments before it disappeared beneath the waves for the final time.

"Hatches are certainly open across the submarine, which corroborates the claim that it was deliberately sunk," says Professor Rowland.

"It is possible, however, that divers may have visited the wreck before it was protected. Indeed, it is highly likely that divers may even have been inside the sub, though this would be exceptionally dangerous.

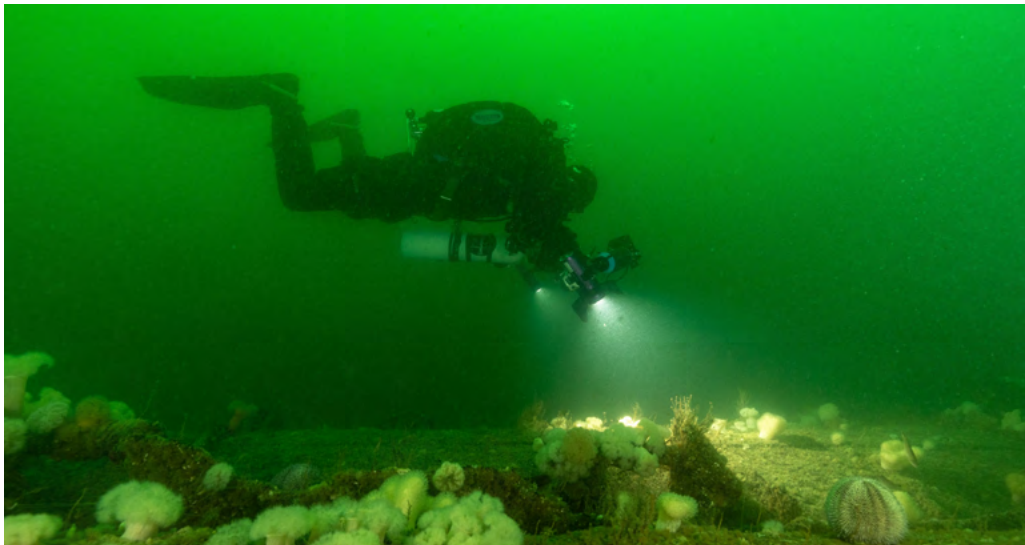
"But given what we know and from the



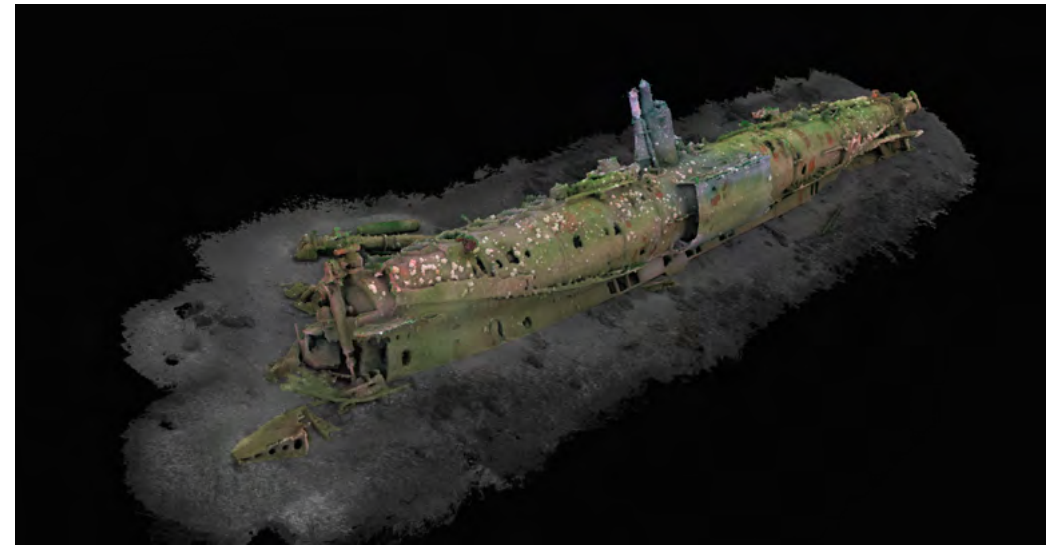
Capturing the 50-metre vessel took place over four, hour-long dives, with thousands of images taken. (Prof Chris Rowland / Prof Kari Hyttinen / University of Dundee)

Professor Chris Rowland, an expert in the 3D visualisation of underwater environments at Dundee's Duncan of Jordanstone College of Art & Design, and Professor Kari Hyttinen, an expert in Communication Design.





The divers used high-intensity lights and the latest camera equipment to map the wreck-site (Prof Chris Rowland / Prof Kari Hyttinen / University of Dundee)



Another view of the well-preserved wreck (Prof Chris Rowland / Prof Kari Hyttinen / University of Dundee)

physical evidence witnessed when we were down there and from our imagery, it is likely that the boat was sunk deliberately.”

Launched into action in November 1916, UC-71 conducted 19 enemy patrols, sinking 61 civilian ships throughout the conflict, via either torpedo or mines.

Following the signing of the Armistice on 11 November 1918, the vessel, like others in the German Navy was to be turned over to the Allies. However, on 20 February 1919, as UC-71 headed for the UK from its homeland, the submarine sunk off the German Archipelago of Helgoland. A telegram from its captain cited bad weather and high waves as the cause.

It came to rest 22 metres below the surface, where it remains to this day.

Professor Rowland worked with Florian Huber, underwater archaeologist with scientific diving company Submaris, to visit the wreck site off the German archipelago. Using state of the art camera and lighting equipment, he was able to capture the stricken sub in unprecedented levels of detail.

The full reconstructions are produced using a process called photogrammetry, with sophisticated software and powerful computers working to create the highly detailed 3D renders.

High intensity lights allowed the team to traverse the wreck site,

shooting both still images and video to produce a sequence of overlapping images. “It was a flat seabed without too much silt, which made the process of capturing the wreck fairly easy,” said Chris, who has previously surveyed the wreck of HMS Royal Oak.

“Indeed, compared to some of the wrecks near Orkney it was a walk in the park.

“It feels like we’re making a portrait and while we’re using sophisticated cameras, it’s not vastly different from using an iPhone. People watching us say it looks like underwater synchronised swimming and I suppose it is. We try to keep the same distance apart and travel at the same speeds to ensure we have an

accurate picture of the vessel.”

Interest in UC-71 was revived recently following the publication of a diary entry from the ship’s Engineer. It sparked the claim that the ship had been deliberately scuttled, with an entry stating, “No Englishman should step on the boat. That was the will of the crew, and they achieved it”.

Previous visits to the wreck site have, with permission, seen the boat’s net cutter returned to the surface, as well as extensive charting of its final resting place on the seabed. However, these new 3D images are the most detailed of UC-71 to date and provide a fascinating insight into the final moments of the boat.

As one of the few World War



One-era wrecks in a good state of preservation, it is considered a site of outstanding significance and is legally protected to deter potential trophy hunters.

Asked about the importance of the wreck, Professor Rowland added, "This wreck is different from many others because it was sunk by an act of defiance, not an act of war. While the conflict may have been declared over, for those who sailed on submarines such as UC-71 there was still a tremendous sense of loyalty to their crew, their boat, and their nation.

"I've spoken with navy veterans in the past and they have asked me why we put these images together, particularly on wrecks where people have died. For me, the answer is not always about the vessels, but for those who were onboard.

"While nobody died in this sinking, UC-71 is associated with a great loss of life at sea. By capturing this particular wreck we are able to capture a moment in time that allows us not only to study this single act, but also serves to remind us of those whose lives were claimed by the vessel during the hostilities."

With the wreck site now comprehensively mapped, there are plans for a two-metre, 3D model of the wreck to be produced using the Dundee imagery, that will sit alongside the crew member's journal at a museum on Helgoland.

Jonathan Watson
Senior Press Officer

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Don't settle for 2nd best



Film - No Filter,
No White Balance



Digital - No Filter,
Manual White Balance



Digital - Magic Filter, Manual
White Balance

Digital cameras have opened up new possibilities to underwater photographers. For available light photography manual white balance is an invaluable tool for restoring colours. But when you use it without a filter you are not making the most of the technique. You're doing all the hard work without reaping the full rewards.

These three photos are all taken of the same wreck in the Red Sea. The left hand image was taken on slide film, which rendered the scene completely blue. The middle image is taken with a digital SLR without a filter, using manual white balance. The white balance has brought out some of the colour of the wreck, but it has also sucked all the blue out of the water behind the wreck, making it almost grey. The right hand image is taken with the same digital camera and lens, but this time using an original Magic Filter. The filter attenuates blue light meaning that the colours of the wreck are brought out and it stands out from the background water, which is recorded as an accurate blue.

Simple and inexpensive, yet so effective.

www.magic-filters.com

Gobies: Lembeh's Underdog Stars

by Sam Robertshaw

The Lembeh Strait in North Sulawesi, Indonesia, is renowned worldwide as one of the premier muck diving destinations. For quite some time, it has been a bucket-list destination for macro enthusiasts, attracting thousands of divers each year.

The reason is simple: the abundant presence of the most famous, rare, and elusive critters that have a place on many diver's wish lists. Divers travel from all around the world to search for species like Hairy Frogfish, Mimic Octopus, Blue-Ringed Octopus, Coleman Shrimp, and Flamboyant Cuttlefish and with a bit of luck in Lembeh it's possible to see all of these amazing critters and a great deal more in just a single day of diving.

Having had the privilege to live and work here for several years, I've come across divers of various backgrounds, ages and with differing levels of experience when it comes to muck diving and macro photography. Despite this, there is a very clear pattern when it comes to what people are hoping to see once they plunge into Lembeh's waters.

One family of fish that often gets overlooked and is rarely requested

are gobies. Gobies are small fish that are found worldwide and are one of the largest families of fish with over 2000 known species, at least 500 of them can be found in the Indo-Pacific region. Their appearance and habitat can vary dramatically between the species meaning whichever dive site you choose, there are always gobies to find.

As for why they are seldom mentioned when divers are asked about what they would like to see, I believe there are a few reasons. One possible explanation is that gobies are often excluded from macro bucket lists due to the abundance of other famous muck critters found in Lembeh. After all, bucket lists can only be so long!

In addition to this, it's very possible that there are many divers who just aren't familiar with gobies at all.

Another reason is that some, if not most, gobies are notoriously tricky to photograph. They are typically very shy fish which is reflected either by their chosen habitat or their extremely skittish behaviour. Lots of patience may be required to take shots of gobies and therefore divers are faced with a dilemma. Do you choose to



A popular subject with all divers, small, cute, brightly coloured and with great big green eyes.what's not to love about these little Yellow Pygmy Gobies (Lubricogobius exiguus)

*Canon R5, 100mm, Nauticam Housing, 2 INON Z330 strobes
1/200s, f11, ISO 100*

dedicate large portions of your dive to try get a shot or two of a specific goby, or do you take advantage of the numerous critters in Lembeh's waters and take photographs of all of them?

I think for divers who are visiting Lembeh for the first time or those who have limited time here, it's fair to

expect them to want to see as many new critters as possible and take at least a few photos of each of them. There's a good chance that you'd still manage to capture a few shots of the more common goby species whilst you're at it. For those who have "ticked off" many of Lembeh's



Sometimes this may just be the clearest view you get! Living in tightly packed hard coral, these Five-lined Coral Gobies aren't the most helpful when it comes to posing for a photo. Don't try to follow them in the coral, watch their movement and focus on a spot where they like to come back to.

*Canon 1DX, 100mm, Nauticam Housing, 1 INON Z330 strobe
1/200s, f8, ISO 100*



*A rare occasion where this Magnificent Shrimpgoby (*Tomyamichthys emilyae*) allowed me to get close enough to reach my lens' minimum focus distance.
Canon R5, 100mm, Nauticam Housing, 1 INON Z330 strobe. 1/200s, f8, ISO 100*

highlights or for those who are lucky to spend an extended period of time here, gobies are great to delve into. Whether it's to discover new creatures or to explore fresh photo ideas, you will never get bored of gobies.

For me personally, the passion I have for gobies now didn't arrive until relatively late. As with many muck diving lovers, my attention had originally been on creatures such as sea slugs, crustaceans and cephalopods. My favourite critters by far were frogfish and there would be no doubt at all that I would

photograph every frogfish that I happened to swim by. After spending many years photographing these amazing subjects and learning lots about them, my focus turned towards gobies.

I had always been somewhat aware of gobies, I knew they were small, pretty fish that could be found almost anywhere on a dive site and with thousands of species, it was quite difficult to choose where to begin. Once I started working here in Lembeh, they started to attract my interest more and more. They



*Easily one of the most requested critters in Lembeh, the Hairy Frogfish (*Antennarius striatus*) with a bit of backlighting to make those hairs glow!*
Canon R5, 100mm, Nauticam Housing, 1 INON Z330 strobe, Kraken NR2000 torch.
1/125s, f4, ISO 100

appeared to be much more plentiful here and the guides here at NAD Lembeh Resort clearly had a very strong passion when it came to spotting them and helping their guests achieve excellent photos.

I took inspiration from my bosses and the owners of the resort, Simon and Zee, who are both very keen goby photographers. I looked to them for help with identification and they gave me tips on where to search for certain species. Another stroke of luck was meeting a couple of

longterm guests Jon and Sakae, who have written a book about the gobies of Lembeh. Their knowledge and insight about goby behaviour, how to photograph them and the variation between species was extremely useful and we've managed to share some amazing "Goby hunting" dives together.

So it was really arriving here in Lembeh, where my addiction to these fascinating little fish started. Soon enough there were dives here where gobies were all I would photograph.



*The Yasha Goby (*Stonogobiops yasha*) is a fan-favourite for goby lovers worldwide however it's not a critter many divers are familiar with worldwide. Quite a rare sighting in Lembeh and as you don't want to scare it back into its burrow, you can feel a bit of pressure taking its photo.*
Canon 1DX, 100mm, Nauticam Housing, 2 INON Z330 strobes
1/200, f7.1, ISO 100

Searching for species I hadn't seen yet and trying to improve the photos I had previously taken was always in the back of my mind during every dive. Of course it's impossible to ignore the other magnificent critters here in

Lembeh which I'm still blown away by, but I could not tell you the last time I did a dive where I didn't photograph a single goby or three.

It's hard to say for sure how many individual species of goby

can be found in Lembah as we are continuously finding species that haven't been previously seen here. So far, at least 300 species have been spotted and photographed in the Lembah Strait, so it's more than likely that the real number is much higher than that. Akin to other families of reef fish, many gobies share the same appearance with only small distinguishing features that differentiate the species. Identification can often be tricky, as spotting some of the smaller, rather transparent species is a challenge on it's own, let alone photographing them.

For most divers, their first introduction to gobies in Lembah typically starts with Whip

Coral Gobies. These species, as the name suggests, live on whip corals that are found on all dive sites here. Their movement is a lot more predictable than other gobies because they are constrained to the surface area of the coral on which they reside, this makes them a much easier subject to photograph. You can afford to be slightly picky with which individuals you choose to photograph since they are so abundant, waiting to find one that has a nicely coloured coral ideally where the polyps are open. You have a few different options when shooting them as well depending on the image you are trying to achieve. A narrow aperture to

create a black background is a classic macro photography technique used for these gobies but they are also an excellent subject to open up the aperture and get yourself a brighter or even blue background.

From there the next most common goby to discover is the genus of Ghost Gobies. These little gobies live in many different habitats but these you will often see living on tunicates, sea squirts, sponges and in and amongst hard and soft coral. These gobies are a particularly popular subject, not necessarily due to the fishes' appearance, but because of their chosen habitats and the enhancement it can provide to underwater macro photography. Their vibrant and distinctive habitats offer a unique perspective compared to the typical murky environments encountered on muck dives. Incorporating some nicely coloured pink sponge or soft coral for example, creates an entirely different feel to an image that you may not be able to achieve with other subjects.

Looking to the substrate, we then start to discover the never ending world of Shrimpgobies. These fish share an incredibly interesting relationship with species of Pistol/ Snapping Shrimp. In this mutualistic relationship, they work as a team that benefits both the goby and the shrimp. The shrimp's duty is to dig out



A perfect "starter" goby. Common Ghostgobies (Pleurosicya mossambica) are found on a wide variety of substrate....all you have to do is find one that is perched nicely and shoot away.

*Canon R5, 100mm, Nauticam Housing, 1 INON Z330 strobe
1/200s, f5, ISO 100*

a burrow for them to live in and it will work tirelessly to perfect it. The goby's job is to keep a watchful eye out for any predators. The two of them will keep constant contact through the shrimps antennae and the goby's fins, if there is any danger, the goby will dart into the burrow and the shrimp will follow swiftly.

Many of the most in demand shrimpgobies have beautiful dorsal fins, from intricately detailed fan-shaped fins like the Magnificent

Shrimpgoby or elongated, delicate dorsal fins like the Yasha/Orange-Striped Shrimpgoby. With some species these dorsal fins denote whether an individual is male or female and some species use these dorsal fins as a form of communication, most likely for courting in the same manner as a bird of paradise. Combine these fins with the beautiful colours and patterns on their bodies, shrimpgobies are a truly spectacular subject to photograph.



Seeing both the Magnificent Shrimpgoby (Tomiyamichthys emilyae) and its shrimp buddy out of their burrow like this was an extremely lucky sighting, a cleaner background would have been delightful but the subjects take centre stage. Canon 1DX, 100mm, Nauticam Housing, 2 INON Z330 strobes 1/200s, f8, ISO 100

Playing with various lighting techniques such as backlighting or snooting is an experiment very worthwhile with these fish. However their incredibly shy nature may not allow you much time before they disappear back into their burrow. Patience and slow movements whilst you creep closer to them is key in order to get close enough to fill the frame.

Next, we begin searching for gobies that not only are incredibly small but also hide within small cracks and crevices in rocks, shells, or coral

formations. Some species that tick those boxes are the Yellow Pygmy Goby, Hairy Goby, Ribbon Reefgoby, Convict Goby and numerous others. These species have become firm favourites for macro photographers mostly due to their incredibly intricate patterns and colours. Yellow Pygmy Gobies are certainly one of the most requested and well known goby species here as they have become quite synonymous with Lembeh diving, much like a Hairy Frogfish for example.

The Yellow Pygmy Gobies are

unique in that they usually live in pairs and choose spots where they can look out safely, knowing they can retreat into their den immediately. They could be hiding in coconut shells, normal seashells and frequently we will also find them in discarded glass beer bottles that provide a perfect shelter for these little gobies to lay their eggs. The shot of a pair of Yellow Pygmy Gobies looking out straight into the camera lens has become a bit of a classic Lembeh photograph and you can certainly play around with that. Using a snoot to only light up the fish is a common technique and some enjoy using coloured lighting on individuals that reside within glass bottles.

Photographing gobies is not always easy and it may well be a big factor as to why divers may prefer creatures like nudibranchs or frogfish where there is significantly less risk that they can quickly dart away or hide. In particular the shrimpgobies and dartfish (which are a member of the goby family) are increasingly difficult to photograph. Patience with slow and steady movements is the name of the game.

For me, capturing goby photos presents an enjoyable challenge, much like blackwater photography where you really feel a great sense of achievement when you achieve a nice image.

Gobies are becoming increasingly popular with the influence of social media and at NAD Lembeh Resort we are undeniably seeing an upwards trend in divers coming here and asking about them. We all know about divers travelling the world looking purely for species of sea slug, I feel soon we may start to have hordes of divers travelling around the world just for gobies. They are incredible subjects to photograph and some can provide a nice little challenge if you felt muck diving was getting too easy!

Sam Robertshaw

[Instagram](#)

www.nad-lembeh.com

[Instagram](#)



Drive-In Diving South Florida's Urban Nudis

by Gabriel Jensen

South Florida is known for its glitzy nightlife, endless condos, engineered canals, and sordid history- but it should also be known as a world-class dive destination for Sea slug enthusiasts.

Stretching between Jupiter in the North all the way to the world-famous South Beach, The South Florida metropolitan area is bordered by the nutrient-rich Everglades to the West and the 3rd largest reef tract in the world to the East. Well known to local divers, much of the region's best wildlife can be found in the urban canals and under roadway bridges. There are endless viral videos of sharks, dolphins, crocodiles, manatees, and goliath groupers taken from dazzled passersby as they jog across bridges or peek into canals, but sea slugs seem to get lost in the cast of underwater characters.

Having taken a particular interest in Nudibranchs, I was delighted to find that nearly every interesting genus of sea slug prized by photographers in the Eastern Pacific was represented by at least one similar species in Florida.

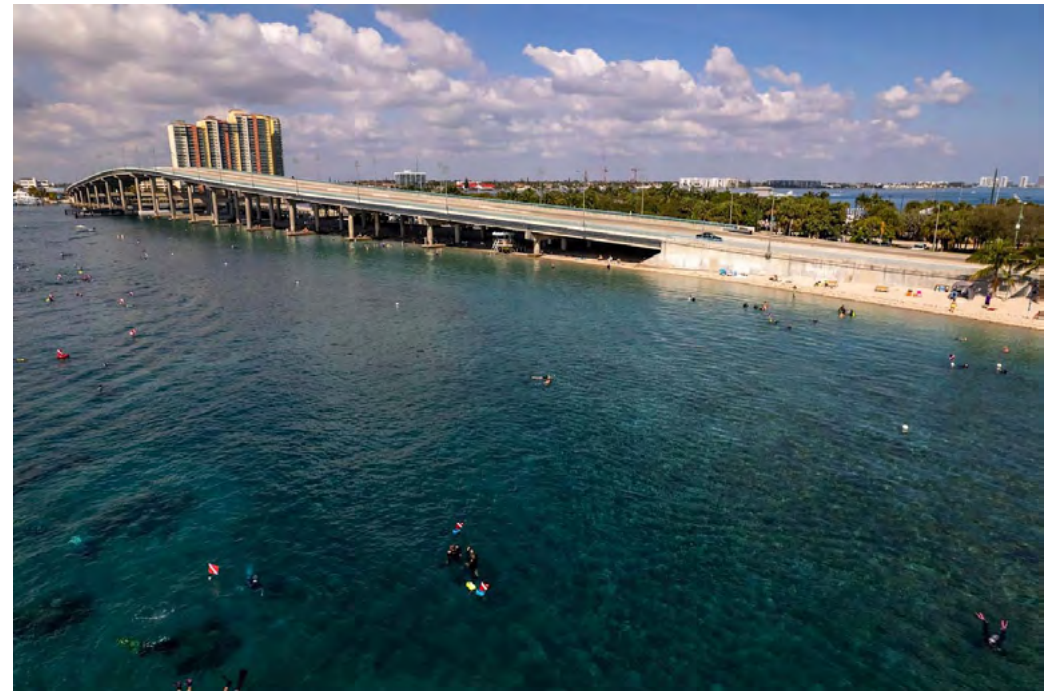
Now on a quest to save on my cross-pacific airfare, please join me while we look at the incredible variety of sea slugs thriving just a stone's throw away from the busy roadside.

Under the Bridges and in the canals:

The most famous and extensively covered dive site in North America is the Blue Heron Bridge.

While it is widely regarded as the most accessible place in the region to find sea slugs, there are other bridges that capture most of the same magic and, more importantly, have varying levels of salinity - a key ingredient for finding a variety of sea slugs. Swimming slowly, I've discovered that each habitat has its own smorgasbord of slugs.

Cratena peregrina is a common sighting at all high salinity shore based locations, and they prefer coming out at night. This Nudibranch will flare its nematocyst lined cerata at you if you shine your light for too long. Photographed using Sony a6500, Nauticam Housing, Sony 90mm Macro + Nauticam CMC-2, Backscatter MF-2 x2, F22 1/100s, ISO100, DMF mode.



Blue Heron Bridge - world class subjects and access





A Pair of Felimare juliae pose on the most productive sponge for spotting sea slugs, Dysidea etheria, common on shallow sections of the Florida reef tract. Photographed using Sony a6500, Nauticam Housing, Sony 90mm Macro, Backscatter MF-2 x2, F22 1/160s, ISO100, DMF mode.



Felimida clenchi is a rubble dweller found under the bridges, in the canals, and off the beaches. Photographed using Sony a6500, Nauticam Housing, Sony 90mm Macro + Nauticam CMC-2, Backscatter MF-2 x2, F11 1/100s, ISO100, DMF mode.

The Wide-Open Prairie:

I believe the prettiest sea slugs are the solar-powered cousins of nudibranchs, the sacoglossans. They thrive in the seagrass environments in the intracoastal saltwater ‘lakes’ that form inside the major inlets.

Lake Boca, Lake Worth Lagoon, Haulover, and upper Biscayne Bay via Rickenbacker Causeway have seagrass meadows; all great places to park your ride and suit up for a slug hunt in front of very confused party boats.

The Busy Beachside:

The Florida Reef Tract comes within 100 meters of dry land in some parts of Broward County, providing easy shore access to sunlit shallow reefs teeming with sea slugs. The only con is working to get the sand off before heading home.

All of these unique ecosystem must be approached with the same sense of responsibility and conservation as any other habitat.

Tips for finding Roadside Nudibranchs

1. Choose the Right Time: Opt for diving near the high or low slack tides to take advantage of calmer conditions. This is critical around bridges where tidal currents can be extreme. Tidal Information is freely available from various surf forecasting websites.

2. Memorize what they eat: This goes for finding nudis everywhere, but knowing what your target sea slug

eats means you have a better chance of tuning your focus and spotting them.

Paying special attention to the algae and sea sponge sections of ID books like Caribbean Reef Life by Micky Charteris can give you the edge when looking for these tiny treasures.

3. Bring extra magnification: While there are a few jumbo hotdog size nudibranchs in the region, you’ll find there are many, many more beautiful and colorful pinto bean or grain of rice size slugs on each dive.

Take advantage of these plentiful



Coryphella Verta is a hydroid dweller common under local bridges, imaged here using a shimmer background. Photographed using Sony A7RIII, Nauticam Housing, Sony 90mm Macro + Nauticam SMC-1, INON z330 x2, F18 1/100s, ISO100, DMF mode.

tiny subjects by bringing some extra help for your long macro lens in the form of a wet magnification lens. I am a fan of the Nauticam CMC and SMC series of magnifiers because of their edge to edge corner sharpness.

4. Prepare for backscatter: Many of these environments suffer from excess nutrient runoff, so visibility can range from 50 feet+ to just past your



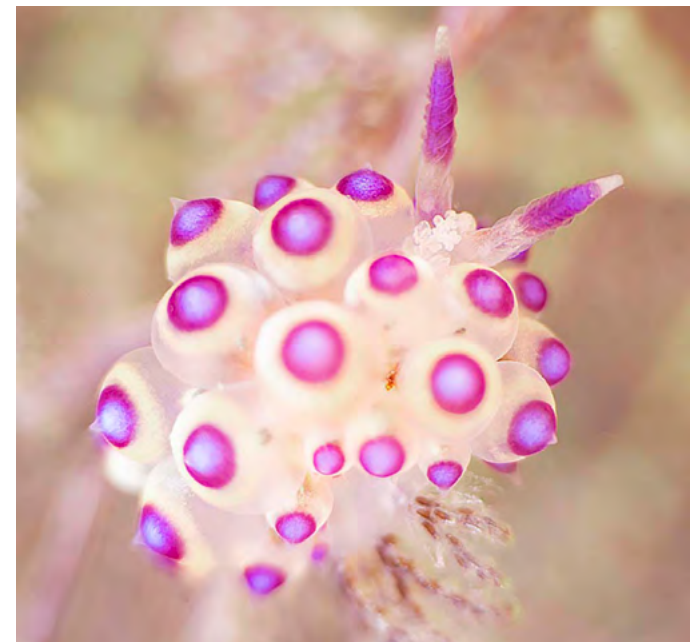
Plocamoperous Lucayensis exclusively lives on the purple feather bryozoans which tend to encrust submerged concrete structures. A common find in winter, they will hide during the day and come out at night. Double snooted image from behind and from on top. Photographed using Sony a6500, Nauticam Housing, Sony 90mm Macro + Nauticam CMC-2, Backscatter MF-2 x2, F16 1/160s, ISO100, DMF mode.

fins.

Bringing light control devices like snoots or artificial backgrounds can help you combat the backscatter and separate your subject from the muck. I use a Backscatter MF-2 due to their ease of use, and robust design for mucky environments.

5. Use a Dive Flag: These are some of the busiest waterways on the planet, full of jet skiers and pleasure boats ready to end your underwater imaging-making career. Using a flag lets them know to slow down- especially important since most of these dives are so shallow.

In conclusion, the roadside nudibranchs



Janolus cf flavoannulatus is an introduced species of nudibranch native to Southeast Asia, now a rare find at various Palm Beach County bridges, including the Blue Heron Bridge. 10mm Juvenile Photographed using Sony a6500, Nauticam Housing, Sony 90mm Macro + Nauticam CMC-2, INON z330 x2, F11 1/160s, ISO100, DMF mode.

of South Florida offer a unique and accessible opportunity for underwater photographers and marine enthusiasts to explore the ocean's wonders. By diving into these coastal waters, we not only witness the beauty of these creatures but also become stewards of their conservation. Let us celebrate the hidden treasures that lie just next to our ordinary roadsides.

Gabriel Jensen

www.instagram.com/shallowseagallery

Jordan Wrecks

by Nicolas Remy

Ask the average Joe the first thing they know about Jordan, and they will probably mention Petra, the iconic ancient city, carved into massive red cliffs. If you ask a scuba diver, you might also hear about some great wreck diving, which got even better in recent year, as tanks, helicopters and a massive aircraft got purposely sunk there.

I had a chance to dive these wrecks in June 2023, as I got invited to enter the 1st Aqaba Underwater Photography Competition. Together with my model & lighting assistant Matt Waters, we also had time for some sight-seeing, which I will also cover in this post.

Getting there

The Kingdom of Jordan is located in the heart of the Middle East and is mostly land-locked, save for 27km of coastline around the city of Aqaba, where the diving takes place. Aqaba is tucked in the northeastern tip of the Red Sea, in between neighboring Eilat (Israel) and Saudi Arabia, and facing the Sinai Peninsula (Egypt). You can fly direct to Aqaba or fly to Amman, and transfer by private car (120 JOD) or VIP bus (20 JOD) in about 4 hours.

There are several good hotels in Aqaba and many dive centers. We chose Deep Blue Dive Center because of their passion for underwater photography, efforts to minimise environmental impact and their comfortable boats. We were treated with a warm, Jordanian welcome, 5-star service and had lots of fun onboard.



Underwater photographers Damir Zurub and Kathy Mih, at work near the C130 wreck.

Nikon Z9, Nauticam NA-Z9 housing, Nikon 8-15mm f/3.5-4.5 E fisheye with FTZ adapter, 140mm glass dome port, 2x Retra Flash Pro strobes.

We dove mostly on Deep Blue 2, a 23.9m long motor yacht. It is simply the most comfortable boat I have used for a single-day dive trip, full stop!





The Cedar Pride is one of Jordan's oldest wrecks. Nikon Z9, Nauticam NA-Z9 housing, Nikon 8-15mm f/3.5-4.5 E fisheye with FTZ adapter, 140mm glass dome port, 2x Retra Flash Pro strobes. 1/80th @ F13. ISO 500.



View from inside the Hercules' cockpit. Nikon Z9, Nauticam NA-Z9 housing, Nikon 8-15mm f/3.5-4.5 E fisheye with FTZ adapter, 140mm glass dome port, 2x Retra Flash Pro strobes. 1/125th @ F11. ISO 400.

Diving logistics

Every morning, a mini-bus picked-us up at our hotel downtown and drove us to the Tala Bay marina, where Deep Blue Dive Center is located. We would then embark one of their boats for a double-tank dive, with a tasty lunch served in between, and refreshments after the second dive. Most days we were on Deep Blue 2, a 23.9 meters long motor yacht which had the amenities and comfort of a full blown liveaboard,

even though we were using it just for daytrips!

Upon return to the marina, we would leave our gear onboard, and the Deep Blue staff took care of cleaning and drying our wetsuits and put everything together for the next day, so that we could just hop back into the bus and return to enjoy Aqaba city.

The story behind the wrecks

Aqaba is nowadays one of the

world's top wreck diving destinations, and this has a lot to do with the Jordanian Royal Family's keen interest in scuba diving. This all started in 1985, when the late King Abullah II ordered the sinking of the Cedar Pride ship, followed by an anti-aircraft tank (M42 Duster) in 1999. A tank sitting on sand is an unusual sight to say the least, and photos of that particular wreck have been widely published. Due to the pandemic, it is perhaps less known that an extra 20 wrecks got scuttled in 2019, which I will cover

below.

The 74m-long Cedar Pride shipwreck is Aqaba's first purposely sunk wreck. Having spent 38 years in the Red Sea, it features hard and soft corals plus interesting marine life: lionfish, clownfish, turtle, anthias and giant frogfish are some of the regulars. The wreck sits between 27 and 9 meters depth, and I found safety-stop depth was perfect to take a good look (and scenic photographs) of the ship, courtesy of the 20-25 meters visibility.

Given the sheer size of the boat,

it is worth several visits to cover the various points of interest, and I recommend alternating between morning and afternoon dives, for a different atmosphere. My favorite spot is the crow's nest at 15 meters depth, which nicely stands out from the blue water, while being covered in colorful corals and fish life – a great photo opportunity. Another good photo-spot is the stern (17m deep), whose handrails are covered in red corals. If you back-off a little from the stern, towards deeper water, you'll find a small pinnacle inhabited by anemonefish: another good photo to take, with the wreck visible in the background. It's also possible to explore the engine room and cabins inside the wreck, for divers suitably qualified.

Aqaba's first plane wreck is the Hercules C-130, a large military troops carrier which was sunk in 2017 nearby the iconic M42 "duster" tank, which has been there for 24 years. The plane is quite shallow, with the cockpit sitting in about 13 meters of water, while massive tail is in 17 meters depth. Unfortunately, in 2020 a severe storm roared through the gulf and cut the C-130 in two, so you will find the tail and the cockpit are now separated.

Both make for interesting photos and you'll find a skeleton, tastefully installed on the pilot's seat, sharing



The Military Museum. Ascend a couple of meters/feet shallower, to start getting a sense of the scale of this dive site. Nikon Z9, Nauticam NA-Z9 housing, Nikon 8-15mm f/3.5-4.5 E fisheye with FTZ adapter, 140mm glass dome port, 2x Retra Flash Pro strobes. 1/50th @ F13. ISO 400.

the cockpit with a school of glassfish. You will encounter a small coral garden as you ascend towards the beach, and at 6 meters depth you can spend your safety stop exploring the famous M42 tank, which has been sitting there for 24 years.

A second plane wreck got scuttled just before Covid19, but this one was a commercial aircraft: a Lockheed L-1011 Tristar. With a 50m length and 400 passenger capacity, the TriStar is a wide-body airliner, in the same league as your modern

Airbus A350 or Boeing 787. For anyone who likes air travel, this aircraft will be a joy to dive: the two rows of three seats have been left inside the two cabins, along with carry-on baggage compartments, roof-mounted video projectors and – cherry on the cake –

the cockpit holds all navigation instruments.

The cockpit sits on a 17m sandy bottom, with the rest of the plane sloping down to a maximum of 30m, which is the bottom of the tail. The wreck is easy to penetrate and the depth inside the passenger cabins goes from 16 to 26 meters. Unlike modern twin-jets airliners, the TriStar has a third engine mounted on the tail, which you can enter from the bottom of the deepest cabin and exit via the intake, bringing you above the fuselage. This is one of the many photo opportunities on this wreck, which photographers will enjoy visiting multiple times. If it is marine life you're after, check below the wings where soft corals have grown rapidly, and between the seats for the occasional porcupinefish!

After our first dive in the Underwater Military Museum, I remember telling my buddy Matt: "mate this place is the ultimate playground for grown-ups!"

Indeed, no less than 19 wrecks got scuttled off the same beach, to create the world's first underwater military museum. Imagine swimming over Cobra helicopters, cannons, jeeps, and various armored vehicles, including troop carriers, M42 Duster tanks, an ambulance and FV701 Ferrets!

As divers, we tend to swim about a meter over the bottom and this is best to spot the marine life which now inhabits those wrecks. However, I recommend you also ascend by a few meters, to appreciate the museum from above. It feels like flying when you're hovering above these military vehicles, which you will notice are laid-out in battle formation. Most of the wrecks 15 to 20 meters deep, with one of the two choppers being the deepest point at 27 meters, and two jeeps are parked at safety-stop depth.

Obviously the 19 wrecks are the main



Anemonefish live in between the two helicopter wrecks, which provide for a unusual backdrop! Nikon Z9, Nauticam NA-Z9 housing, Nikon 8-15mm f/3.5-4.5 E fisheye with FTZ adapter, 140mm glass dome port, 2x Retra Flash Pro strobes. 1/50th @ F13. ISO 400.



I promise this is not Raja Ampat, but one of the pillars of Bernice Jetty in Aqaba! Nauticam NA-Z9 housing, Nikon 8-15mm f/3.5-4.5 E fisheye with FTZ adapter, 140mm glass dome port, 2x Retra Flash Pro strobes. 1/50th @ F13. ISO 400.



Nauticam NA-Z9 housing, Nikon 8-15mm f/3.5-4.5 E fisheye with FTZ adapter, 140mm glass dome port, 2x Retra Flash Pro strobes. 1/50th @ F13. ISO 400.

attraction, but I wish I could come back with a macro lens: my buddy noticed two robust ghost pipefish next to a helicopter, and a large concentration of garden eels lives just above the M42 tanks.

It is possible to see all of the wrecks in one dive, if you're good on air and don't mind swimming long distances. As a photographer though, I much preferred dedicating my dives to specific parts of the site.

Aqaba also has several coral reefs to offer, plus some very lively jetties. We had one dive under Bernice Jetty, and despite the shallow 4 meters depth, it was an underwater photographer's paradise: lionfish were patrolling the pylons, covered with colorful soft corals, while glassfish were diffusing the sunrays just below the surface. A treat for the eye and the lens alike!

Petra is only a 2 hour drive away from Aqaba, making it an easy day-tour to complement

the diving, and I can't recommend it enough. It is one thing to see the ancient city in photos, but an awe-inspiring experience to see the ancient building unfold before you, as you walk in between red sand-stone cliffs.

The Wadi Rum desert is close-by too and both places can be visited as a daytrip from Aqaba. The Dead Sea is another interesting sight but much further away, so it is easier to visit from Amman.

The wrecks of Aqaba offer a fun diving experience and a great playground for underwater image makers. There is a good diversity of small marine life too and I'll bring a macro lens for my next visit. Aqaba itself is a lively city where it felt safe to walk after sunset: we much enjoyed the local eateries and occasional rooftop bar. All-in-one, Jordan offers a great combination of unique diving and bucket-list sites like Petra and Wadi Rum.

If you're considering a visit to Jordan, I can't recommend enough that you contact Deep Blue Dive Center, a photography-friendly operator who offer an exclusive 10% discount to Members of The Underwater Club!

Nicolas Remy

www.theunderwaterclub.com

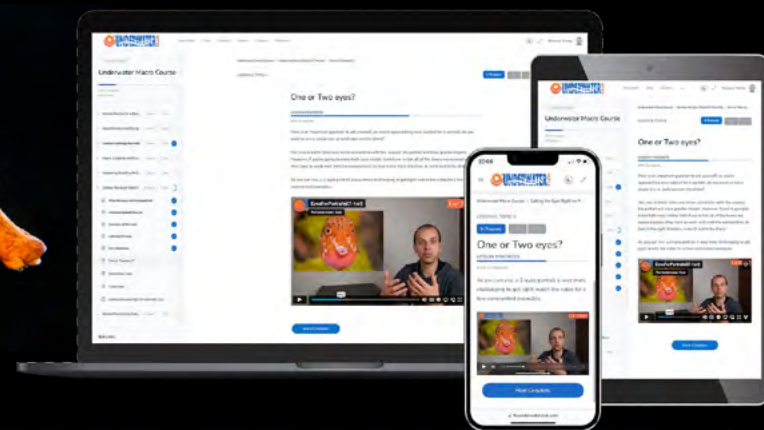
www.deepbluedivecenter.com



Nicolas Remy is a freelance underwater photographer based in Sydney, Australia. His images have won over 35 international awards and are frequently published in print and digital media. Nicolas collaborates with diving and photography equipment manufacturers for product field-testing, he is known for the detailed, insightful reviews which he has authored, and is a seasoned travel writer.

In 2023, Nicolas founded The Underwater Club, a first-of-its-kind online underwater photography school & community, offering 40 self-paced eLearning lessons, monthly events and exclusive deals from club partners.

UNDERWATER PHOTOGRAPHY ONLINE COURSES



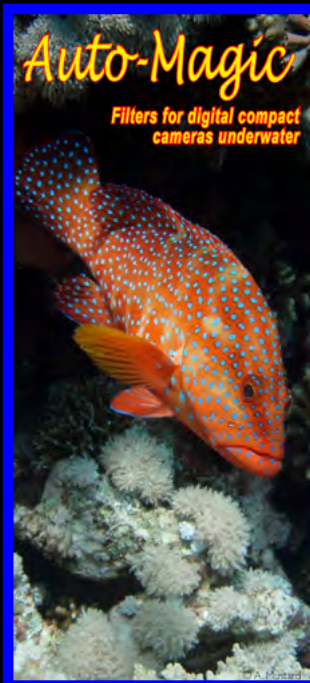
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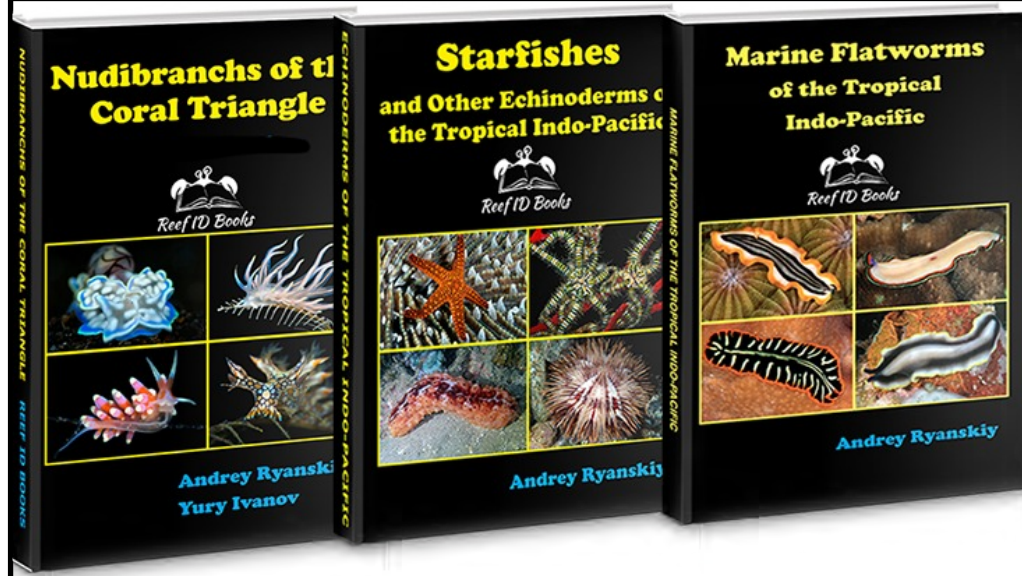
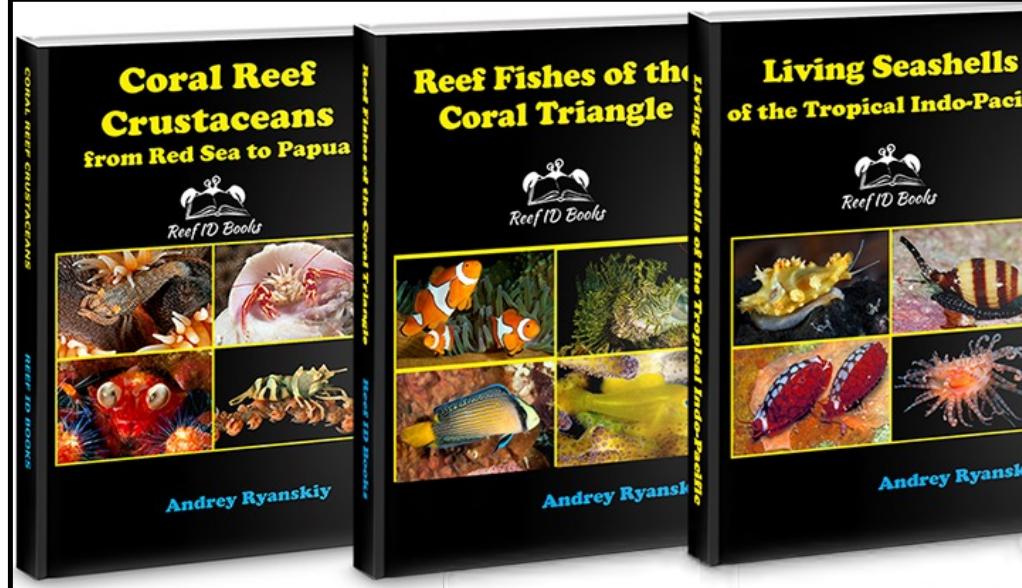


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Marshall's Mysteries 14

A

© Colin Marshall / Alamy



Bali, Indonesia

image about 2 cm across

C

© Colin Marshall



Lembeh, Sulawesi, Indonesia

image about 3 cm across

Do you know what these animals are, or what they are doing? Have a guess – answers on page 78

B

© Colin Marshall / Biosphoto



Bali, Indonesia

image about 6 cm across

D

Match the juveniles (left) with the adults (right)

© Colin Marshall / Biosphoto

D¹



© Colin Marshall / Ardea

D²



© Colin Marshall / Ardea

D³



© Colin Marshall / Biosphoto

D⁴



© Colin Marshall

D⁵



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D⁶



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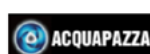
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Marshall's Mysteries 14 - Answers

A



Swimming larval Sea Snail, aka a Veliger, likely from the Tonnoidea Superfamily. Images below show the rounded flap and 4 long velar lobes to keep the planktonic snail moving and to sweep food into the mouth. Eventually the snail will settle on the sea floor, re-absorb the lobes, and metamorphize into a juvenile snail.



© Colin Marshall / Ardea

Lembbeh, Indonesia



© Colin Marshall

Lembbeh, Indonesia

All these images were taken on normal night dives, ie not special blackwater dives. The snails were seen mid-water, nearer the surface than the sea bed.

B



Group of Ctenophores, aka Creeping Comb Jellies, *Coeloplana* sp (due to be described in next couple of years), casting feeding tentacles on Luzon Sea Star (*Echinaster luzonicus*) to catch plankton.

Less Ctenophores are usually seen on sea stars, as shown below (with extended tube feet on starfish).



© Colin Marshall / Biosphoto

Bali, Indonesia

The figure below shows an overhead view of the same sea star, regenerating from a single arm, with a different Ctenophore, *Coeloplana astericola*.



© Colin Marshall / Ardea

Bali, Indonesia

Details on this starfish, cucumber & crab can be found in the book "Starfish and Other Echinoderms of the Tropical Indo-Pacific" by Andrey Ryanskiy on pages 28, 86 & 90 respectively.

C



Sea Cucumber Swimming Crab (*Lissocarcinus orbicularis*) in Royal Sea Cucumber (*Thelenota anax*) anus. Image below shows the crab when the anus has contracted. The crab lives commensally with the cucumber, causing no damage to the cucumber, whose toxicity protects the crab inside the host.



© Colin Marshall / FLPA / Minden

Lembbeh, Indonesia

Full length of Royal Sea Cucumber shown below. These cucumbers are fished commercially as food and for their medicinal properties.



© Colin Marshall / Ardea

Alor, Indonesia

D All these fish are Pufferfish, famously highly poisonous (contain tetrodotoxin, a deadly toxin). The juveniles need to rely on camouflage, as their smaller size means they are likely not so poisonous as adults, which predators have learnt are not for eating. Furthermore, the Pufferfish do not immediately produce tetrodotoxin; it is produced by endosymbiotic bacteria that the fish eats.

The correct juvenile – adult matches are shown below, with some intermediate stages shown.

Star Puffer (*Arothron stellatus*)

All images © Colin Marshall

D¹



D⁵



Note the juvenile lines gradually transforming into dots as shown in the second image, the spots gradually getting smaller as the fish matures.

White-spotted Puffer (*Arothron hispidus*)

D²



D⁶



Note the pufferfish gradually changes from being oval-shaped to a more elongate shape.

Map puffer (*Arothron mappa*)

D³



D⁴



Note how the pufferfish pattern changes from spots to scribbled maze-like markings.

If you think any of the identifications or information above is wrong, please let me know at colintrmarshall@yahoo.com. Feel free to send me any images of anything you'd like some help in identifying – any particularly interesting mysteries may be included in future Underwater Photography issues.

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! UwP is the perfect publication for you to increase your profile in the underwater photography community.

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

Uw photo techniques - Balanced light, composition, etc

Locations - Photo friendly dive sites, countries or liveaboards,

Subjects -, Anything from whale sharks to nudibranchs in full detail

Equipment reviews - Detailed appraisals of the latest equipment

Personalities - Interviews/features about leading underwater photographers

**If you have an idea for an article,
contact me first before putting pen to paper.
E mail peter@uwpmag.com**

How to submit articles

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

1. The text should be saved as a TEXT file and attached to the e mail

2. Images must be attached to the e mail and they need to be 150dpi

Size - Maximum length 20cm i.e. horizontal pictures would be 20 cm wide and verticals would be 20cm high.

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.

My Shot

by Colin Marshall

Coming to the end of a liveaboard trip, I spotted this pulsating Upside-down Jellyfish (Cassiopeia andromeda) around Flores in Indonesia and took a quick solitary snap.

When sorting through my images, I was pleasantly surprised to see that the jellyfish had a passenger – a Portunid Crab. I showed the image to my buddy (my wife), noting that my failure to notice this crab whilst taking the picture was a one-off lapse in my observational skills, excused by the fact this image was taken on my 30th dive of the trip, so I was a little tired.

My wife gave me her familiar “you’re an idiot” expression, and she explained that in addition to my many other failings, I am hopelessly unobservant, which I petulantly refuted.

My lesson learned was that I was lucky to get a pleasing image from a single shot, and clearly needed in the future to take more images in case something is hidden in the image which I am not immediately aware of, or the animal disappears, or my air runs out, or other photographers (and especially the dreaded videographers!) turn up and

monopolise the animal.

This “take-more-images” solution is, of course, nonsense.

Better lessons from this experience, to improve my observational skills, could include the following :

- Slow down and examine the subject before taking the picture. The extra time taken could also avoid startling the animal, encouraging it to hang around.
- Instead of looking in the open areas, search the nooks and crannies. Not many animals sit out in the light, showing off.
- Put aside your egotistical desire to find things yourself and stay close to guides. Whilst it is undoubtedly satisfying to find an unusual creature yourself, the guide is much more likely to find it.
- Research marine life and look for specific corals and sponges that specific creatures call home in the relevant diving area. If you have an idea of what to look for, its shape, behaviour and where it lives, you are more likely to find it.
- Look around continuously, including above and behind you. Don’t just focus on the immediate square metre



Subal, Nikon D200, Nikkor 60 mm f/2.8. f9 @ 1/80. ISO : 100. 2 x Sea & Sea YS 110

area under you, or your camera viewfinder.

Unsurprisingly, I don’t follow these lessons very well – I am still a “work in progress” on trying to improve my observational skills (and most of my other failings). I still follow the “take-more-images” methodology,

trying to randomly capture an extraordinary image, like a monkey on a typewriter trying to write William Shakespeare’s Hamlet...

Colin Marshall
colintrmarshall@yahoo.com

Do you have a favourite shot or an image/s which made a dive special?

E mail yours with some text to

peter@uwpmag.com

and yours could be the next My Shot/s

(It’s very easy. Images can be any size bigger than 20cm (horizontal or vertical) @ 150dpi saved as jpeg format and about 500 - 750 words would be fine.)

Parting Shot

by David Fleetham

From my observations, it appears that anemonefish do not venture too far from the protection of their home anemone so I always wondered if they ever were hosts to the many parasites that are found on other reef fish.

I was on the island of Yap for Mantafest 2023 and spent quite a while on one dive letting a group of common anemonefish, *Amphiprion perideraion*, get used to my presence for some portraits.

After a while a juvenile wrasse joined the scene and the anemonefish would take turns getting a close inspection.

The anemonefish would hover and spread their fins to expose any little crevice where a tiny parasite might be hiding. So it turns out that if you can't make it to the cleaning station down the reef, then the cleaner will come and make house calls.

This species of anemonefish is most often found associated with the anemone, *Heteractis magnifica*, as pictured here, Yap, Micronesia.



Canon EOS R5 mirrorless in an Ikelite dry-lock housing with a Canon RF 100mm macro lens, 1/125 sec, F29, ISO 160, with two Ikelite 230 strobes on TTL.

David Fleetham
www.davidfleetham.com

**Do you have a shot
which has a story within a story?
If so e mail it with up to 500 words of text
and yours could be the next Parting Shot.
peter@uwpmag.com**

(It's very easy. Images can be any size bigger than 20cm (horizontal or vertical) @ 150dpi saved as jpeg format and about 500 - 750 words would be fine.)