



# 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

[info@bunakenoasis.com](mailto:info@bunakenoasis.com)  
[www.bunakenoasis.com](http://www.bunakenoasis.com)

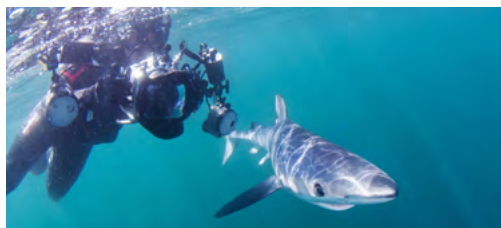


# Contents

## 4 Editorial

Starting the collapse, Best magazine

## 5 News, Travel & Events



## 13 New Products



## 24 Nauticam MFO-1

by Byron Conroy



Cover shot by  
David Fleetham

## 28 Marelux Apollo III 2.0

by Henley Spiers



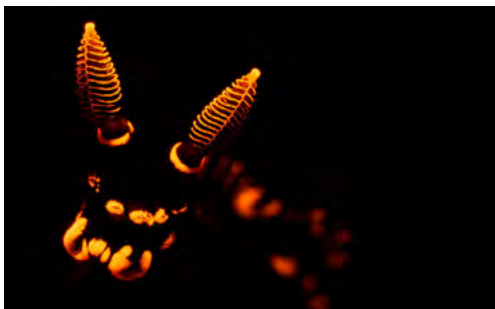
## 35 David Fleetham

by Peter Rowlands



## 43 Fluoro fun

by the Backscatter Team



# Underwater Photography

A web magazine

UwP144 May/ Jun 2025

## 46 Dive into Lembah

by Andy Deitsch



## 50 Nudibranch Safari

By Lars Stenholt Kirkegaard



## 58 Basking Sharks

by Colin Munro



## 64 Marshall's Mysteries 21

by Colin Marshall

## 68 My Shot

by David Fleetham



## 69 Parting Shot

by David Fleetham



Underwater Photography 2001 - 2025

© PR Productions

Publisher/Editor Peter Rowlands

[www.pr-productions.co.uk](http://www.pr-productions.co.uk)

[peter@uwpmag.com](mailto:peter@uwpmag.com)



Issue 144/3

[www.uwpmag.com](http://www.uwpmag.com)

## Starting the collapse

Bashing a brick off the top of a tall chimney stack will make virtually no difference to its performance but remove just a few from the base layer and you will almost certainly make the whole structure collapse.

A similar situation is taking place in Antarctica where 14 supertrawler factory ships are hoovering up krill to sell them as Omega-3 supplements and feed for salmon farming. These small crustacea are a vital food source for many marine animals, including whales, penguins, and seals. They also play a crucial role in nutrient cycling and carbon sequestration within the Southern Ocean.

Sure, the Antarctic waters are a huge area but krill concentrate in smaller defined areas and, if they are targeted and removed, the very building blocks of life in the ocean will be severely affected.

The result could lead to a collapse of the delicately balanced marine eco system and, as we have seen from the brick chimney scenario, the food chain will collapse affecting each and everything in its wake.

Sea Shepherd are fighting a vital campaign to highlight and cease this pointless plunder and they need all the support they can get.

[www.seashepherd.com](http://www.seashepherd.com)



Issue 144/4

# Editorial

## Voted Best Magazine on Inside Scuba website

I was delighted to read recently that UwP has been highlighted as the best magazine 'For Increasing Your Underwater Photography Knowledge' and one particular comment rang true - 'The magazine's commitment to showcasing reader submissions also fosters a sense of community, allowing aspiring photographers to gain recognition and learn through constructive comparison.'

### Link

I'm pleased they picked up on that because, right from the off, that was always a significant intention. It started with Parting Shot - images with a story within a story, followed by My Shot - a much wider net aimed at showcasing individual images which meant a great deal.

The whole point of these two sections was to encourage new talent to see their work published without having to write a lengthy essay and so have their work appreciated by a much wider audience.

There have been Parting Shots and My shot(s) in almost every issue but they have fallen away recently for some reason in terms of the number of contributions. Maybe it's too

intimidating for a newcomer to submit their image and text for scrutiny? All I can say is that every contribution is welcome and that very, very few, if any, get turned down. Tweaked a little, maybe, but rarely thrown out.

I'll never forget the thrill of having my first images and article on Anglerfish published in Diver Magazine. It was a huge boost to my confidence and there was even a modest cheque in the post a few weeks later.

Money is always good but it paled in comparison to the sheer thrill of seeing my work reproduced in a magazine. The money side has faded away sadly but that thrill will always remain.

I actively welcome Parting Shots and My Shot(s) submissions and successful examples of what we are looking for are in each and every issue together with details of how simple it is to submit them.

I really do look forward to hearing from you.

**Peter Rowlands**  
[peter@uwpmag.com](mailto:peter@uwpmag.com)

**UW**  
**CAMERA**  
**STORE** .COM

External Flash Underwater Photos  
An external flash helps you get better underwater photos. But... you choose the right one.

Underwater cameras for more advanced photographers  
For the underwater photographer who wants to control settings, use more techniques and get creative with their shots.

Underwater camera and Point  
Discover the best to compare camera, internal camera.

View Buying Guide

**OUR ALL NEW BUYING GUIDE**  
ASSISTS WITH FINDING YOUR NEXT GEAR  
**STILL STUCK? OUR PROFESSIONALS ARE READY TO ASSIST!**

©Marco Heesbeen

**LET'S MAKE STORIES TOGETHER!**

[www.uwpmag.com](http://www.uwpmag.com)

# News, Travel & Events

## Shark Trust Launches Photography Competition



Have you snapped any stunning images of sharks or rays? Or even the intricate eggcases produced by many species? Perhaps you've been lucky enough to encounter a chimaera? Then you could be the next Shark Photography Champion! The Shark Trust has just launched their photography competition designed to celebrate the diversity and beauty of these animals.

From now until the 15th May 2025 – photographers can enter up to four images into the photo competition. And this competition is a little different. There are no categories to have to decide where to enter your images. But there will be awards for the overall champion, and also winners selected for the following:

British Isles and Overseas. In addition, we'll be looking for entries for the Best Eggcase, Young Shark Photographer (U18), and entries relating to the Shark Trust's programmes: Mediterranean, Living with Sharks, and Oceanics.

A host of great prizes are up for grabs! Including a shark dive & stay package in Nassau with accommodation at Breezes and diving with Stuart Cove's Dive Bahamas courtesy of Diverse Travel and The Bahamas Ministry of Tourism. Perfect for creating a shark diving trip of a lifetime around. Two Mares Quad 2 computers, Scapa Joe Sculpture, Shark Trust Teemill merchandise and more.



The finalists will be selected by a panel of judges (Charles Hood, Nick Robertson-Brown, and Simon Rogerson), be printed by Astralis Print and Design, and put on display at Ocean Studios at Royal William Yard in Plymouth for the whole of July during Shark Month. Here, members of the public will be able to vote for their favourite image from the finalists on display. All the winners will be revealed at the end of July.

You don't have much time to enter! Dig out your best images of sharks, rays, skates, chimaeras or eggcases, and follow the link to enter before the 15th May 2025.

[www.sharktrust.org/photocomp25](http://www.sharktrust.org/photocomp25)

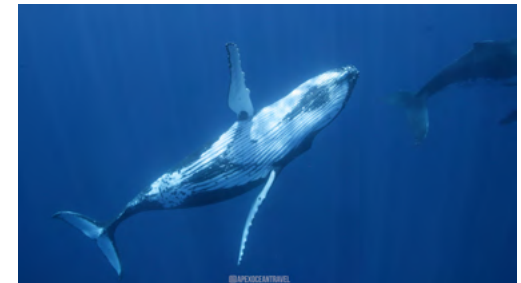
## Mo'orea Humpback Expedition

September 13 - 20 2025

September 20 - 27 2025

October 4 - 11 2025

\$4500



Join us for a week in the South Pacific to snorkel with gentle giants - humpback whales!

Enjoy the comforts of a seaside luxury resort and uncover the beauty of French Polynesia.

Get face to face with some of the most intelligent ocean animals!

The first two people to book will receive a \$200 discount

[www.apexoceantravel.com](http://www.apexoceantravel.com)

[www.uwpmag.com](http://www.uwpmag.com)

## Sea Shepherd saving the krill in Antarctica



*Watch the 2024 Campaign Video*

In 2025, SSCS is proud to partner with Sea Shepherd Global, including Sea Shepherd Germany and Switzerland, to lead a unified campaign for the protection of Antarctic wildlife. This partnership will strengthen our efforts to safeguard krill, the cornerstone of the Antarctic ecosystem, which supports baleen whales, penguins, seals, and seabirds. Together, we will bring world-renowned whale and krill scientists to the Southern Ocean to collect data and advocate for marine protected areas (MPAs), aiming to protect the region from industrial fishing.

The threats to Antarctica have never been more severe. With an industrial fleet of 14 supertrawlers targeting krill for Omega-3 supplements and salmon farming, the stakes for marine life and the balance of this fragile ecosystem continue to rise. In response, SSCS and our partners are returning to the Southern Ocean aboard the Allankay to track and expose the harmful activities of these fleets. This mission is a call to action for protecting Antarctica's last great wilderness and ensuring the survival of the species that depend on it.

[www.seashepherd.org/antarctica/](http://www.seashepherd.org/antarctica/)



Issue 144/6



## Solitude Lembeh workshop with Tobias Friedrich and Simon Lorenz 12/7/25 to 19/7/25

Want to advance your photography skills, learn how to shoot black backgrounds, how to work full manual, snoot, or backlighting. Or are you completely new to photography? This workshop suits all levels. We will also do Lightroom and Photoshop, introductions, basics as well as advanced training sessions. Learn from award-winning photographers Tobias Friedrich and Simon Lorenz everything you need to get better at your photography.

What place is better for photography training than Lembeh?

Home to the rarest critters of the underwater world, you can lie comfortably in the sand while shooting Mimic Octopus, Wanderpus, Hairy Frogfish or Rhinopias, just to name a few.

Your Photo Coaches Tobias Friedrich and Simon Lorenz are professional underwater photographers and experienced photo coaches. They will aim to advance each photographers level of photography from where they are at the given moment.

[www.insiderdivers.com/lembeh](http://www.insiderdivers.com/lembeh)

[www.uwpmag.com](http://www.uwpmag.com)

## Ghost Fishing Summer Free Prize Draw!

Win a GFUK Prize Bundle worth up to £100 including a Hoodie, Tee and Bracelet.

From now until the end of August, every ghost gear report you submit will count as an entry into our prize draw! Report at [www.ghostfishing.co.uk/report](http://www.ghostfishing.co.uk/report)

The more you submit the more entries you get! No limit!

We're looking for high quality, genuine reports. Please don't make them up!

Entries close 31.08.2025

The Prize Bundle will be awarded to a randomly selected winner from all valid entries on the 06.09.2025

Full terms and conditions can be found at: [www.ghostfishing.co.uk/competition/terms](http://www.ghostfishing.co.uk/competition/terms)

Report Now and Win!

We're an award-winning British charity (no: 1174396), and since 2015, we've been on a mission to clean our oceans by removing Abandoned, Lost, and Discarded Fishing Gear, also known as 'Ghost Gear.'



Our team is a dedicated group of volunteer scuba divers trained in advanced diving techniques to minimize environmental impact. We're passionate about making our waters safer for marine life and scuba divers by eliminating these hazardous entanglements.

With over 70 volunteers, we're proud to be an independent organization tirelessly tackling the ghost gear problem.

[www.ghostfishing.co.uk/report/](http://www.ghostfishing.co.uk/report/)

## Trump executive order opens up marine protected areas in Pacific waters



The US President has signed a proclamation to unleash American commercial fishing in the Pacific Ocean, a key component of the America First Fishing Policy.

It allows commercial fishing in areas long considered off-limits due to their ecological significance—despite overwhelming scientific consensus that marine sanctuaries are essential for rebuilding fish stocks and maintaining ocean health.

These actions threaten some of the most sensitive and pristine marine ecosystems in the world.

In response to the announcement, Arlo Hemphill, Greenpeace USA project lead on

ocean sanctuaries, said:

“Opening the Pacific Islands Heritage Marine National Monument to commercial fishing puts one of the most pristine ocean ecosystems on the planet at risk. Almost 90 percent of global marine fish stocks are fully exploited or overfished.

The few places in the world ocean set aside as large, fully protected ocean sanctuaries serve as ‘fish banks’, allowing fish populations to recover, while protecting the habitats in which they thrive.

[www.rnz.co.nz](http://www.rnz.co.nz)

## alamBatu Resort, Bali



When Doris Vierkötter came to Bali in 2002, she fell in love with the island and its inhabitants. Intent on setting up her own resort, she traveled far and wide before finally discovering the bay with the black rocks that gave the resort its name. Together with her Indonesian friend Sri, she was able to lease the bay that – until then – was a barren, bleak spot with a saltworks. With passion, dedication and great flair, Doris designed the resort and employed native workers to build it, bungalow by bungalow. The fruit of their labors: a wonderful place for diving and also a haven of wellbeing and relaxation.

The underwater world in Bali offers a great variety of species. Located in the southwestern part of the coral triangle, the richness of the coral reefs is unique. More than 3.500 species have been discovered here. The Indonesian current is in charge of transporting plankton to the reefs around Bali. This very important

current transports the water from the Pacific Ocean, via Java and Banda Sea, to the Indian Ocean. This optimal geographic situation guarantees the great diversity of fish, coral, and critters; including nudibranchs, rhinopias, ghost pipe fish, cowries, boxer crabs, mimic octopus, wonderpus and many more.

The alamBatu house reef, situated directly off the resort, is a wonderful and mostly untouched reef of over 800 meters. The coral diversity varies from soft corals, black corals, table corals and gorgonians up to 2 meters in diameter. The corals shelter a fantastic underwater world with many schools of fish (including

juvenile barracudas, snappers), reef sharks, sea horses, harlequin shrimps and other critters.

With a bit of luck you can also see dolphins, pilot whales and ocean sunfish passing by.

Snorkeling is also possible and is a good alternative to scuba diving. The top of the reef offers you to see many different sea creatures.

Night dives and fluo-diving are also offered. Equipped with a blue light and a special filter for your mask, the fluorescent animals glow in different colors; providing a glowing underwater experience that you will love.

Aside from the beautiful house

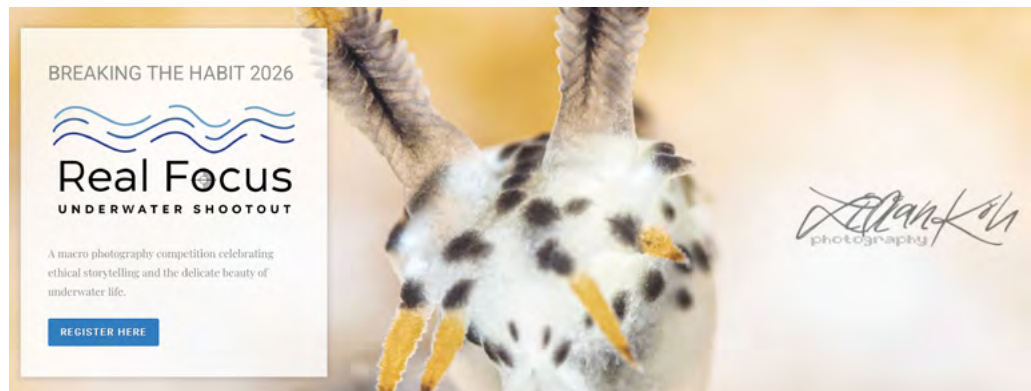


*Doris Vierkötter, Owner | Danny Byland, Manager | Sri Kusuma Dewi, Manager*

reef, there are numerous nearby dive sites that offer a variety of diving options including coral diving, muck diving and wreck diving. By Boat it only takes 15 minutes to get to the “Liberty” wreck or to the famous dive spots “Drop off”, “Ulami” and “Coral Garden” in Tulamben.

alamBatu is also an outstanding place for macro photographers. Our dive guides are great at spotting micro critters such as pygmy sea horses and other small species.

## Real Focus, February 15, 2026 – April 30, 2026 Solitude Acacia Resort (Anilao) & Solitude Lembeh Resort (Lembeh)



REAL FOCUS bridges photography, science, and ethics—uniting conscious divers in a one-of-a-kind shootout and marine research initiative.

Join us for the REAL FOCUS: Underwater Photography Shootout 2026, an underwater macro photography competition held across two of the world's most iconic muck diving destinations—Anilao, Philippines, and the Lembeh Strait, Indonesia. These legendary sites, known for their astonishing biodiversity and charismatic critters, set the stage for a photo competition unlike any other.

For the first time, each image you submit—and every thoughtful frame you offer beyond it—will help shape a groundbreaking 3-year marine species behaviour study, led by globally renowned marine biologist Dr Dave Harasti. By gathering data on species,

sightings, habitats, and conditions across two parallel ecosystems, we're building a living visual record—one that serves science as deeply as it celebrates creativity.

This Year's Theme: Breaking the Habit

Can beauty be captured without manipulation? Can photography drive change?

Breaking the Habit challenges participants to rethink their underwater approach—letting go of staging, chasing, or touching—and instead, honouring the moment and the subject.

The goal? Images that are not only stunning but Honest. Ethical. Transformative.

Whether you're an experienced shooter or dipping your fins into the macro world for the first time, this is your chance to grow, connect, and create something that matters.



Guests staying at either resort during the competition period for at least 3 nights are eligible to enter. Dive into this exciting opportunity to capture stunning images, connect with a vibrant community of underwater photographers, and contribute to a competition that's as rewarding as it is transformative.

This isn't just about the perfect shot. It's about honouring the moment, respecting the subject, and telling stories that matter.

[www.solitude.world/realfocus/](http://www.solitude.world/realfocus/)

## Palau with Nigel Marsh 13 - 21 September, 2025



Join Nigel Marsh for an incredible dive trip to Palau to explore rich coral reefs covered in fish and sharks, wonderful World War II plane and shipwrecks, colourful walls, mysterious blue holes and incredible sea caves.

Over five diving days we will be exploring dive sites like Blue Corner, which is famous for its sharks and schooling fish, Chandelier Cave, one of the few ocean caves where you can see stalactites, German Channel, where you can watch manta rays being cleaned and watch the early morning spawning of thousands of bumphead parrotfish at Ulong Sand Bar.

During our stay we will also be diving many other amazing reefs like Ulong Channel, Blue Holes and New Drop-off and also exploring a number of World War II shipwrecks like the Helmet Wreck, Iro and the Teshio Maru.

[www.nigelmarshphotography.com](http://www.nigelmarshphotography.com)



## New Thai regulations for less experienced underwater photographers

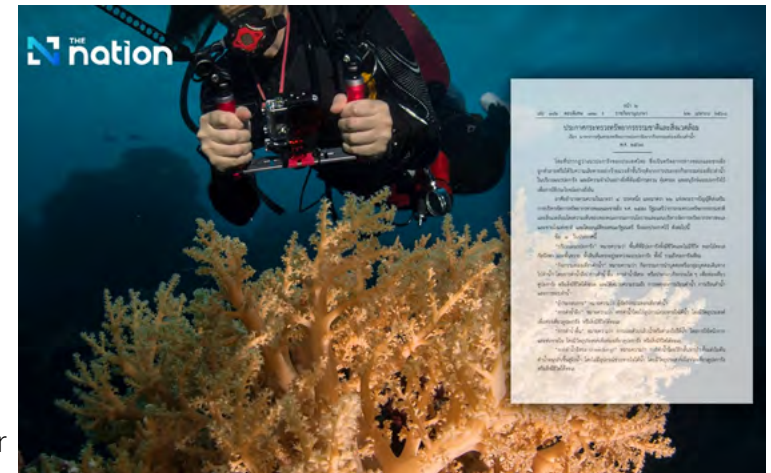
Holidaymakers planning to scuba dive in Thailand's coral reefs face new restrictions on underwater photography.

The Royal Gazette has announced a ban on carrying cameras during deep dives for most divers, in a bid to protect the country's fragile marine ecosystems.

The new measures, issued by the Ministry of Natural Resources and Environment, state that only divers certified to Advanced Open Water level or those with a logbook proving at least 40 deep dives will be permitted to take cameras underwater. They must also be able to present their certification or logbook to officials upon request.

The authorities have cited the severe damage to Thailand's coral reefs from diving tourism as the reason for the stringent regulations, emphasising the urgent need for conservation to ensure sustainable use of these vital marine resources.

For snorkellers, the rules



stipulate that the water level must be at least two metres above the coral to minimise disturbance. Dive operators, licensed instructors, and their assistants are empowered to immediately halt the diving activities of anyone who disregards their guidance.

Furthermore, instructors and assistants who fail to warn non-compliant tourists could face the revocation of their licences.

The new rules will not apply to diving activities undertaken for academic research, education, or marine conservation and restoration projects carried out under the supervision of relevant authorities.

[www.nationthailand.com](http://www.nationthailand.com)

[www.uwpmag.com](http://www.uwpmag.com)



# The 20th World Shootout Awards Are Open!

Calling all underwater photographers!

The prestigious 20th World Shootout Awards are officially open for entries in 8 still categories and a video clip!

We invite you to submit your most impressive underwater photographs captured between **November 2nd, 2024**, and **November 1st, 2025**.

## Cash and Dreamy prizes

**ENTER TODAY >>>>**

[www.worldshootout.org](http://www.worldshootout.org)

## Second Underwater Awards Australasia Imaging Competition Launching in June 2025

DPG is thrilled to announce the second edition of the Underwater Awards Australasia—the premier underwater imaging competition focused on the Australasian region. Like the hugely successful inaugural edition, the 2025 competition is a three-way collaboration between the long-established Underwater Australasia, DPG, and underwater imaging equipment and dive gear distributor UW Images.

The prizes, worth more than A\$50,000 in total, include dive trips with the world’s top resorts and liveboards, as well as the latest underwater photo and video gear. Entrants compete for prizes in 9 categories, including the unique “Reels Showcase” video category. The top image or video among the category winners receives the distinction of “Best of Show.” This year’s prestigious judging panel comprises photo judges Tobias Friedrich, Jayne Jenkins, Matty Smith, Tanya Houppermans, Scott Portelli and William Tan; and video judges Philip Hamilton and Ross Long.

The competition calls for passionate underwater shooters from



around the world to submit their most captivating and compelling images and videos from the Australasian region. Shooters are invited to immerse themselves in the challenge of capturing the essence of this extraordinary realm, where every frame tells a story of the delicate balance and breathtaking beauty that characterises our oceans.

The competition opens on June 1 and closes on July 20, 2025. Winners will be revealed during an awards ceremony at the Go Diving Show ANZ, September 6–7, and subsequently on UnderwaterCompetition.com. The results will be published by supporting media partners worldwide shortly thereafter. The entry fees are US\$10 per image or video entered.

[www.underwatercompetition.com](http://www.underwatercompetition.com)

## Jacob Guy joins the Scubaverse Underwater Photography Team



*Jacob Guy*



*Shannon Moran*

We're thrilled to announce the final addition to our new Scubaverse Underwater Photography Team: multi-award-winning underwater filmmaker and photographer Jacob Guy.

Jacob represents the next generation of underwater image-makers, bringing fresh energy and a seriously impressive set of credentials to the team. A Fourth Element ambassador, teacher at The Underwater Club, and co-founder of 71%, Jacob is passionate about conservation and natural history storytelling, using his lens to inspire a deeper connection to the ocean.

Jacob has filmed and self-produced award-winning documentaries and worked as a photo and video pro in Lembeh and on liveaboards throughout Indonesia. Most recently, he was named Young Ocean Photographer of the Year,

further cementing his reputation as one of the most exciting emerging talents in underwater media today.

Shannon Moran is an award-winning underwater photographer and visual storyteller based in Falmouth, Cornwall. A graduate of Falmouth University, she specializes in capturing the vibrant and often unseen beauty of marine life in British waters and beyond. In addition to her photography, Shannon is a PADI MSDT and works for Fourth Element as a Drysuit Specialist.

With a deep passion for ocean conservation and a keen eye for detail, Shannon's work has been featured in Underwater Photographer of the Year and the British Wildlife Photography Awards, among others. She is also published in outlets such as SCUBA, NatureTTL, and UWP Magazine.

With a career spanning over two



*Jane Morgan*

decades, Jane Morgan brings a wealth of experience, creativity, and passion for the ocean. After learning to dive in 1991, Jane's early work in marine conservation and scuba instruction in the Philippines and Borneo laid the foundation for what would become a distinguished career in underwater photojournalism.

Now based in Cornwall, Jane dives the UK coast year-round, championing its often-overlooked marine biodiversity. She is also a proud ambassador for DYNAMICNORD and Fathoms Free, lending her voice and lens to ocean conservation efforts.

Saeed Rashid brings with him a wealth of experience from the worlds of photography, diving, and education. A senior lecturer at Bournemouth University, he teaches photography, journalism, and media, guiding students to develop strong creative and technical skills. He's also a passionate diver and works closely



*Saeed Rashid*

with industry-leading brands like Fourth Element and Suunto.

Beyond his academic and commercial work, Saeed serves as one of the European Coordinators for the Our World-Underwater Scholarship Society, helping young people pursue careers in marine science, conservation, and exploration. Through his company, Focus Visuals, Saeed runs popular underwater photography workshops, and he's also part of the team behind the prestigious Underwater Photographer of the Year competition.

The Scubaverse team is made up of a group of divers who collectively have over 50 years worth of experience in dive media, and are totally committed to bringing you the very best and latest news, reviews, articles, blogs, photos and video from every corner of the diving world.

[www.scubaverse.com](http://www.scubaverse.com)

# New Products

## Nauticam NA-S1RII Housing



The Panasonic S1R II seems more of a redesign than an evolution, both in terms of capabilities as well as form factor. The new S1R II is built around a 44MP 8.1K sensor that allows for both high resolution stills capture as well as 8K video at up to 30p with low rolling shutter effect. The S1R II can also record ProRes RAW or 422 at selected resolutions and frame rates. Promising improved autofocus, more in-line with its peers, the S1RII features phase-detection and enhanced subject tracking.

In addition to an overall smaller footprint, the S1R II also has relocated 'Movie' mode from the exposure mode dial to a dedicated switch below the drive mode dial. This frees up the exposure dial to have 5 custom

mode positions which have discrete settings for stills and video mode.

In addition to the high-resolution video capture specs, the S1R II also features Panasonic's dual-gain ISO. A new Dynamic Range Expansion mode can be enabled when shooting in V-Log to gain an additional stop of highlight information. The S1R II also adds a false-color overlay of pixel brightness to help both still and video shooters prevent clipping. Support for real-time LUTs and Open Gate Capture show the S1R II is really a full-featured hybrid camera.

The Nauticam NA-S1RII is a professional aluminum underwater

housing that delivers fast and intuitive access to all the essential controls of the Panasonic S1R II camera underwater. Pairing the NA-S1RII with Nauticam's extensive line of Water Contact Optics and accessories further enhances the camera's already impressive still and video capabilities.

[www.nauticam.com](http://www.nauticam.com)

**UW**  
**CAMERA**  
**STORE** .COM

External Flash Underwater Photos  
An external flash helps you capture more underwater photos. But... you choose the best camera for your needs.

Underwater cameras for more advanced photographers  
For the underwater photographer who wants to control settings, use more techniques and get creative with their shots.

Underwater camera and Point  
Discover the best compact camera for your underwater camera.

**OUR ALL NEW BUYING GUIDE**  
ASSISTS WITH FINDING YOUR NEXT GEAR  
**STILL STUCK? OUR PROFESSIONALS ARE READY TO ASSIST!**

©Marco Heesbeen

**LET'S MAKE STORIES TOGETHER!**

**81501  
MFO-1**



- provide ample focus distance for different sizes of subjects
- improved optical performance

**PRE-ORDER NOW!**



**17342  
NA-R1**  
Housing for  
Canon EOS R1 Camera

**Nauticam**  
Innovation underwater

Mid-Range Focus Optimizer 1  
Super Macro Converter 3



**81203  
SMC-3**

2.3x magnification



- The SMC-3 weighs only two-thirds of the SMC-1
- Superior Optical Performance
- Slightly less expensive than the discontinued SMC-1
- Increased Working Distance

\*photo by Dr Alex Mustard  
www.nauticam.com

### Insta360 Unveils X5



Insta360, the world's best-selling 360° camera brand, is thrilled to announce Insta360 X5, its latest flagship camera. Combining groundbreaking image quality, rugged durability, and AI-powered ease of use, X5 sets a new benchmark for what 360° cameras can achieve.

X5's larger 1/1.28" sensors and lightning-fast Triple AI Chip system deliver a dramatic leap in image quality across all resolutions, including stunning 8K30fps 360° video. With PureVideo, a new AI-powered low-light mode, X5 achieves crisp, cinematic footage in challenging lighting.

Further hardware upgrades like a built-in wind guard, extended 3-hour battery life, and waterproofing to 49ft, make X5 the ultimate companion for active creators.

[www.insta360.com](http://www.insta360.com)

### Divevolk Underwater External Shutter



Available to pre order, the Divevolk Underwater External Shutter installs directly onto the Divevolk housing or tray to provide an external shutter trigger for smartphones.

It is waterproof to 60 meters and requires CR2032 Battery which will last 50 hours and a shutterlife of 100,000 times.

[www.divevolkdiving.com](http://www.divevolkdiving.com)

[www.uwpmag.com](http://www.uwpmag.com)

# BACKSCATTER MINI FLASH 2



THE  
PERFECT  
MACRO  
STROBE  
FOR  
ANY  
CAMERA



## Underwater Camera Store Equipment Buying Guides



### Underwater cameras for starters and Point-and-Shoot

Discover the best entry-level models with a compact camera, smartphone, or action camera.

[View Buying Guide](#)



### Underwater cameras for more advanced photographers

For the underwater photographer who wants to control settings, use more techniques and get creative with their shots.

[View Buying Guide](#)



### Underwater with Your Smartphone in a housing

You can also take photos and videos while diving and snorkeling using your own smartphone.

[View Buying Guide](#)



### Action Cameras / GoPro for Underwater Use

Dive and snorkel with your action camera or GoPro in a plastic or aluminum underwater housing.

[View Buying Guide](#)



### External Flash Units for Underwater Photography

An external flash helps you capture better underwater photos. But... which flash should you choose?

[View Buying Guide](#)



### Video Lights for Vibrant Underwater Footage

For colorful underwater videos, video lights are essential. We offer a wide range of options.

[View Buying Guide](#)



### Professional high-end cinema equipment for underwater video

Underwater housings from Nauticam and Gates for ARRI, RED, and more. Official Nauticam Cinema specialist.

[View Buying Guide](#)



### Underwater Housings from Various Brands

An underwater housing allows you to safely take your camera underwater while diving or snorkeling.

[View Buying Guide](#)



### Choose the Right Port, Gear, and Extension Ring

Our port charts help you find the correct port, gear, and extension ring for the lens you would like to use.

[View Buying Guide](#)

# BACKSCATTER FLIP UNDERWATER GOPRO FILTERS



[www.uwcamerastore.com/buyingguide](http://www.uwcamerastore.com/buyingguide)

BACKSCATTER

# THE BEST BANG FOR YOUR BUCK



## OLYMPUS E-M10 IV

## Nauticam underwater housing for Sony A9III And A1II cameras

Sony continues to push the limits of mirrorless cameras with the release of the Sony a9 III. This camera has the world's first Global Shutter Full Frame imaging sensor, meaning it can capture every pixel simultaneously. Pair this with the ability to shoot at an astounding 120fps of blackout-free shooting and a flash synch speed of 1/80,000, and you open the door for nearly endless creative possibilities.

The NA-A9III/A1II underwater housing provides unfettered access to 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.

Drawing on Nauticam's successful full-frame Sony underwater housings, this latest housing for the Sony a9 III is sure to be a reliable tool for professional and amateur image makers.

The a1 II is a different, but equally capable, beast: At 50.1MP, its stacked sensor boasts double



the pixels, burst shooting is 20fps in lossless RAW, and there's both 8K/30p and 4K/120p video recording on offer.

These two cameras are all but identical externally, so a single housing can accommodate either without any adaptors.

[www.nauticam.com](http://www.nauticam.com)

SEA&SEA  
THE UNDERWATER IMAGING COMPANY

# YS-D3 DUO

Brighten up your moment!!



[www.seaandsea.jp](http://www.seaandsea.jp)



UW  
CAMERA  
STORE COM

©ERIK DE BOER



## WEEFINE WFH07 SMART HOUSING AVAILABLE AT UWCAMERASTORE



Turn your smartphone into a powerful underwater camera with the **WeeFine WFH07** housing. It's compatible with a wide range of smartphones and built to withstand depths **up to 80 meters**. The integrated **automatic vacuum system** ensures a secure, watertight seal. With the **optical port** you can even **control your videolights**. Pair it with the **Divelt** app to unlock all **intuitive controls** and enhance your underwater photography experience. Whether you're snorkeling or diving, the WFH07 captures every detail in stunning clarity.

LET'S MAKE STORIES TOGETHER!

[www.UWcamerastore.com](http://www.UWcamerastore.com) | [Info@uwcamerastore.com](mailto:Info@uwcamerastore.com)

## AOI Aura Light System



The Signature Series 2025 Edition marks a new collaboration, this time between AOI and award-winning underwater photographer Ace Wu. "Underwater photography is a reflection of art and mirrors my inner state of thought," says Ace Wu.

At the heart of artistic expression lies the drive to push limits and break boundaries. In underwater photography, the challenges and constraints are plentiful.

Ace Wu is among the few accomplished practitioners of 'painting' underwater photos.

"Colors add emotions, create a feeling, and are more than just elements in my images," explains Wu. Currently, equipment used to 'paint' underwater images relies on colored filters placed in front of lights. However, the range of colors is often limited by the number of filters

available, typically just a few. This limitation sparked the idea behind the Signature Series 2025 Edition: How could every imaginable color be made accessible?

No strangers to daunting challenges, the AOI design team explored a host of ideas, ranging from the unconventional to the traditional. The final product exceeded all expectations, earning its place in the Signature Series lineup.

The Aura Light System is a revolutionary departure from conventional underwater lighting.

At its core is a custom-designed mobile app that allows users to select from a palette of 16.7 million colors. The app communicates with an advanced LED torch capable of reproducing the selected color.

[www.aoi-uw.com](http://www.aoi-uw.com)

[www.uwpmag.com](http://www.uwpmag.com)

# UW CAMERA STORE COM



## WEEFINE SOLAR FLARE 4500

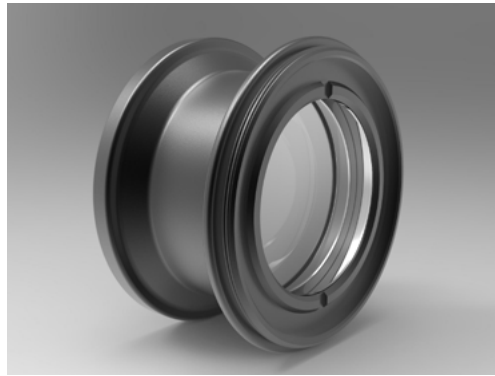
4500 LUMEN COB-LED  
150° BEAM ANGLE  
6000 LUMEN FLASH BOOST



LET'S MAKE STORIES TOGETHER!

 [UWCAMERASTORE.COM](http://UWCAMERASTORE.COM)  
 [INFO@UWCAMERASTORE.COM](mailto:INFO@UWCAMERASTORE.COM)  
 +31 (0)165 55 39 44

## Marelux 42301 Macroview MV-15 Closeup Lens



The Marelux Macroview M-15 Macro Wet Lens is a portable, lightweight macro wet lens that is perfect for underwater photography and videography. It is designed to be used with compact system cameras (CSCs) and mirrorless cameras.

- Lens Construction: 4 elements; 2 groups
- Diopter (Underwater Focal length) :+15 (66.66mm)
- Working Distance :60mm - 85mm (From 1st Lens Surface)
- Max Magnification: x2.6
- Depth Rating : 100m
- Dimensions : 70x40mm
- Mount Type : 67mm
- Weight : Air =252g Underwater =150g

[www.marelux.co](http://www.marelux.co)

## Seacam A9 III / A1 II



The housing for the A9 III and A1 II is the ideal partner for the newest camera models in Sony's pro series. Incredibly fast and precise, perfect for big fish and action photographers – now available in SEACAM silver.

Knobs and control levers:

Power switch, shutter release, front and rear dial, manual focus or zoom, lens release button, MODE, C1 / AEL-index, MOVIE / AF-ON-zoom, drive- and focus mode dial.

Push buttons:

Control wheel and OK middle button, MENU, C3 protect, Fn, play, C4 delete.

Discover the SEACAM housing for the Sony Alpha 9 III / A1 II right here.

[www.seacam.com](http://www.seacam.com)



## 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.

[www.reefphoto.com](http://www.reefphoto.com)

# BACKSCATTER HYBRID FLASH



GUIDE NO.  
**F40**  
AND  
**5000**  
**LUMEN**  
VIDEO LIGHT



## Nauticam 7" G7 HD Ultrabright Monitor



Introducing the Nauticam 7" G7 HD UltraBright Monitor. Crafted for professional videographers and photographers, this advanced monitor delivers an incredibly bright 3000 nit display, ensuring optimal visibility even in challenging lighting conditions. With up to 6 hours of battery life, you can count on it for extended shoots, providing reliable performance throughout your dive. Equipped with essentials such as Focus Peaking, False Color, Histogram and many more, the 7" G7 HD UltraBright Monitor offers you the ultimate monitor for any project.

Inputs and Outputs: The G7 supports both 4K HDMI and 2K SDI inputs as well as SDI output. Please



note HDMI to SDI cross conversion is not supported.

Exceptional Brightness & Clarity: With an impressive 3000 nit brightness, the monitor provides clear, vibrant images even in direct sunlight, so you won't miss a detail.

Advanced Image Control Tools: Easily access the following tools all at your fingertips. Anamorphic De-Squeeze, Customizable Aspect Ratios, False Color, Focus Assist, Focus Peaking, Histogram, Image Flip, Vector scope, Waveform, Zebra

Swivel and Tilt Adjustable Monitor Mount System: This newly designed mount ensures smooth adjustments any any angle, making this monitor an invaluable tool for underwater image makers.

[www.nauticam.com](http://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.

[www.reefphoto.com](http://www.reefphoto.com)

**SEA&SEA**  
THE UNDERWATER IMAGING COMPANY

**MX-R5II**

**Mark II**

**Now ON SALE!**

[www.seaandsea.jp](http://www.seaandsea.jp)

## Weefine WFH07 Smartphone housing

All phones within the sizes 163,5 x 82 x 10mm fit in the housing. Smartphone needs IOS 10.00 or newer or Android 4.3 and above.

The newly launched phone diving app DiveIT creates a wonderful underwater photography experience. The app has integrated dive computer functions: dive logs, compass, multiple gass modes, nitrox and other modes. For photos and videos: zooming, reviewing, exposure adjustment, hand signals, etc.

For most users, the standard (free) version of the DiveIT APP provides more than enough functionality for taking pictures, videos and using the dive computer functions.

For the demanding / advanced diver, the extended (paid) version may be of interest. It offers advanced features like camera lens switching, RAW photomode (iPhone), filters and technical dive computer functions.

Also in this model a vacuum system is integrated and water leakage detection system. This warns you when water is detected in the housing or when it loses vacuum. The built-in electric drive air pump is easy to operate. A progress indicator



makes it clear at a glance. The built-in lithium battery can pump air more than 100 times when fully charged. Charging the housing is with a USB-C port. Also new in this housing is the multi functional hot shoe mount, a lever shutter & roller for easy use of the housing and a fiber optic control port to control Weefine videolights remotely.

The housing is made of high-strength aluminum alloy and can be used to 80 meters depth.

[www.weefine.com](http://www.weefine.com)

[www.uwcamerastore.com](http://www.uwcamerastore.com)



## 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.

[www.reefphoto.com](http://www.reefphoto.com)

# WORKSHOPS

## PHILLIPINES

ANILAO  
MAY 04-11, 2025

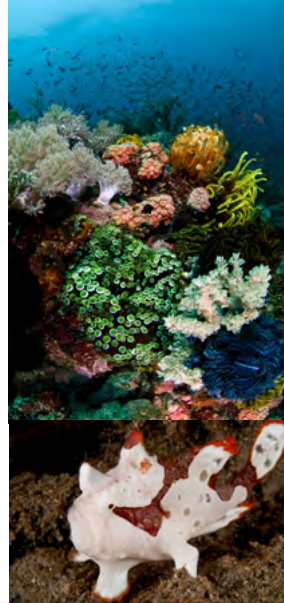
PHOTO  
+  
VIDEO



Join us May 04-11 2025 for a photo & video workshop held at Anilao's most beautiful resort.

Unlimited shore diving, daily boat dives, optional night and blackwater dives. Abundant, friendly support above and below the water.

A few spaces still remaining!



### Weefine Video light SolarFlare 4500



Weefine Video light SolarFlare 4500 (# WF102) with a maximum depth of 100 meters. This light also has a strobe function with 6000lumen!

We are super excited about this new video light! The new Weefine Solar Flare 4500 is a powerful 4500 lumen underwater video light with a flash mode.

Great features:

- > The beam angle is very wide (150°!).
- > The light provides an outstanding light quality. The light is very smooth and bright, which results in true-to-life imaging. (RA90)

- > Flash mode (6000 lumen)
- > Multiple power settings
- > Tough aluminum body.
- > The controls are easy to use.
- > Compact size

[www.weefine.com](http://www.weefine.com)

[www.uwcamerastore.com](http://www.uwcamerastore.com)

[www.uwpmag.com](http://www.uwpmag.com)



**REEF**  
PHOTO & VIDEO  
[www.reefphoto.com](http://www.reefphoto.com)

## Remote control from your smartphone or tablet



Experience seamless WiFi control, continuous power, and integrated LED lighting for your GoPro Hero13

Elevate your underwater videography with the DNC-GP25, designed exclusively for GoPro Hero13, 12, 11, 10, and 9 cameras.

This all-in-one system offers real-time WiFi control, continuous power, and a powerful integrated LED light, making it an essential tool for divers, marine researchers, and underwater videographers.

Monitor live footage, zoom, start/stop recording, and adjust settings remotely via a 30-meter tethered cable.

[www.diveandsee.com](http://www.diveandsee.com)

## Underwater Photography 101



Ready to dive into underwater imaging? This is your place to start with the top articles on everything you need to know about underwater photography from exposure settings to becoming a professional. Learn about techniques, lens selection, editing, essential lighting and accessories, shooting video, and more.

Stay sharp! We post new articles every week and share them via our Friday e-newsletter.

[www.ikelite.com](http://www.ikelite.com)



# WATERPIXELS™

## Underwater Imaging Community



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](http://www.waterpixels.net)

## Snorkelling Britain by Emma and Gordon Taylor

Discover the magic beneath the water's surface with the 100 most beautiful and accessible marine locations in Britain. Explore shipwrecks, rock arches, tidal pools and sweeping bays. Swim through seagrass meadows and kelp forests to uncover a secret world below.

With spectacular photography, detailed site descriptions, and extensive practical information, including a marine life glossary, this comprehensive guide caters to all levels, from families and beginners to seasoned explorers seeking new challenges.

Beginners - Perfect sites for novices in kneeling or standing-depth water  
Experienced - For those who have the necessary skills and seek a taste of adventure

Wrecks and Piers - Explore sunken ships and underwater structures teeming with marine life

Rock Formations - Marvel at magnificent cliffs, dramatic arches and fascinating rock formations

Great Beaches - Sandy bays make for great family days out with variety for everyone

Tidal Pools - Fun and rewarding marine exploration, for beginners and



enthusiasts alike

Seagrass - Huge absorbers of carbon dioxide and a fantastic habitat for diverse marine life

Kelp Forest - Take a bird's-eye view or peer between the fronds of Britain's secret forests

Off The Beaten Track - Discover remote and spectacular snorkelling sites to escape the crowds

Emma & Gordon Taylor are qualified SCUBA and snorkelling instructors and keen sea swimmers. They have spent 20 years exploring Britain's coast and have two young children who also love snorkelling.

£18.99

[www.wildthingspublishing.com](http://www.wildthingspublishing.com)



## Immerse Yourself in the World of Underwater Imaging

### NEWS

Keep up to date with everything that matters to underwater photographers, from the latest gear and gadgets to the newest developments in marine research

### TECHNIQUES

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

### ARTICLES

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

### TRAVEL

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

### CONTESTS

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

# Nauticam MFO-1

by Byron Conroy

There was a time in underwater photography when adding a new lens was the best way to introduce variety into your portfolio. However, in recent years—primarily due to Nauticam—we've seen the rise of water contact optics. These are additions to existing lenses that can alter their optical characteristics. Macro diopters like the SMC-1 and SMC-2 brought unprecedented magnification and image quality. Then came a wave of more complex wide-angle water contact optics, such as the Wide Angle Conversion Port (1 and 2) and the newer Fisheye Conversion Port, which transformed wide-angle zoom lenses.

In the macro world, the SMC-1 and SMC-2 initially allowed for incredibly unique shots. But as a dedicated macro shooter, I found myself using these lenses less and less. They aren't particularly versatile, with a very limited range of subjects they work well for. I began gravitating toward weaker alternatives, such as the Kraken +6, which proved far more useful. It allowed me to shoot a wider variety of subjects and was easier to use thanks to its greater working distance. As a result, I even started leaving my SMC behind on many macro dives.

In the last quarter, Nauticam released a new water contact optic for macro—the MFO-1 (Midrange Focus Optimizer). I've never seen a lens generate so much confusion upon release. This was partly due to Nauticam's slow and somewhat secretive rollout of information, but also because the lens does something we haven't really seen before, making it tricky to understand.



## So What Is the MFO-1 and Where Did the Idea Come From?

Coincidentally, around the same time, two conversations took place—one between Edward Lai (Nauticam's owner) and Ryan Canon of Nauticam USA—where they discussed the impact of water contact optics on image quality. They explored how these optics reduce the aberrations caused by flat ports and macro lenses when used underwater. The idea was to develop a non-magnified optic that would eliminate these aberrations and improve overall image quality.

In 2023, Alex Mustard proposed the idea of a lower-powered diopter to Edward Lai. Unlike the much stronger diopters already in use, this one would simply allow photographers to get a little closer to their subject without the extreme



*The lens allowed me to make this tiny pygmy seahorse a nice size in the frame and create a super sharp and easy to focus shot.*



*You can get super close to subjects such as this jawfish and generate high quality images without noticing you even have the lens on*

magnification.

From this idea, the MFO-1 was born. Several prototypes were developed, each with slightly different optical power, until the version we have today was finalized. The lens does provide a slight magnification effect, ranging between 1.2x and 1.6x depending on the primary lens it's paired with. However, this "magnification" is achieved by altering the focal distance range rather than traditional optical enlargement. When using the MFO-1, the minimum focus distance is reduced—but only slightly.

In essence, the MFO-1 allows you to get closer to your subject while

still maintaining autofocus, making it highly versatile for a wide range of subjects. At the same time, it doesn't prevent you from capturing macro shots as you did before. On a full-frame camera, the focus distance range with the MFO-1 is approximately 1 meter to 10 cm (3.3 feet to 4 inches).

This is why many people find the lens difficult to understand—it doesn't drastically change how you shoot, but it provides just enough of a shift to make a big difference. The subtle adjustment in focus range also eliminates focus hunting, allowing the camera to lock focus more quickly. Additionally, it corrects the optical



*The focusing is a dream for free swimming macro shots that are moving in and out of the shot and towards and away from the camera such as this blue ringed octopus.*

aberrations inherent in traditional flat-port and macro lens setups, ultimately enhancing image quality.

### **How Does the Lens Perform In the Real World?**

On my camera, I'm using the Sony 90mm macro lens. When paired with the MFO-1, the focus distance range shifts to 106mm–1082mm (10.6 cm–108.2 cm or roughly 4.2 inches–3.6 feet). This means I can now get as close as 10.6 cm (4.2 inches) to my subject, whereas before, the minimum distance was around 28

cm (11 inches). At the closest point, this gives me a 1.2x magnification. While that magnification may seem modest, it's far from insignificant—it's incredibly useful for smaller subjects that I want to fill the frame just a bit more, without resorting to the extreme magnification of the SMC.

The best way to describe using the MFO-1 is that you can leave it on for nearly all of your shooting. You don't notice it's there, and you don't notice it's doing anything—until you need it. Then you can simply take that extra step forward.

This shift in focus distance is

particularly helpful in less forgiving water conditions. Cold water macro shooters, in particular, will find this beneficial. The MFO-1 helps produce much cleaner images in situations where you previously would have struggled to achieve sharp, high-quality results.

The focusing performance of this lens is excellent—very impressive, in fact. In my experience, many macro shooters struggle with focus hunting simply because they don't start at the right distance when bringing the camera up to their eye. Often, they're too far or too close to the subject and then rely on autofocus to "find" it, rather than positioning the camera at the correct distance or gently moving it in and out until the subject comes into focus before engaging autofocus.

For me, using this lens was effortless, and it might actually help reduce focus hunting for those who struggle to establish the right starting distance.

The autofocus speed of the MFO-1 is also remarkably fast. I had no trouble using it to track animals swimming across the sand. When using single-spot focus on the eye, the autofocus consistently nailed the subject. Holding the shutter halfway down to track movement worked flawlessly, allowing me to wait for peak action and capture the perfect moment.

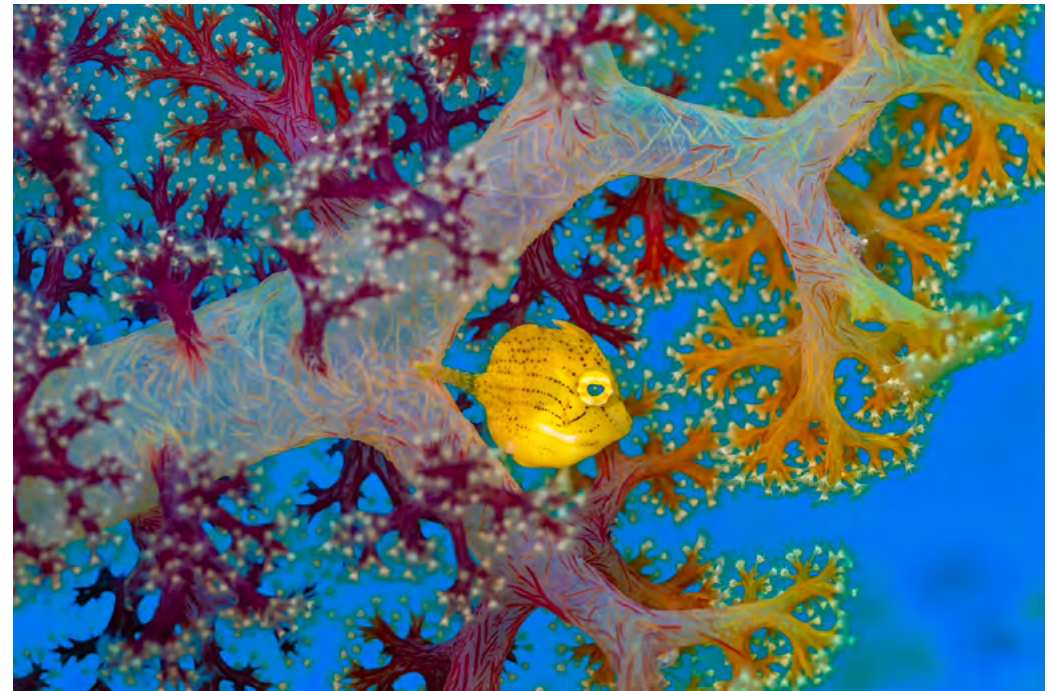
In terms of image quality, the results are sharp, clean, and crisp. I was able to capture some of the clearest portraits of small marine life I've ever taken. This is due to both the improved optical quality and the reduced amount of water between the lens and the subject.

The pygmy seahorse shot below was particularly tricky to capture, but the MFO-1 allowed me to get just a little closer than usual, making the subject slightly larger in the frame. It also let me rely on the camera's standard autofocus while actually making focusing easier than normal. The final image is razor-sharp and has a unique quality that wouldn't be possible with either no MFO or a stronger diopter.

### Mounting the Lens

I've seen many people using flip diopter holders, but I don't recommend them at all. With the increasing number of diopters and other attachments in use today, they're simply not practical. They also interfere with lighting, add unnecessary weight to the front of the camera, and throw off its balance.

For me, the new Nauticam Bayonet Mount is the way to go. This system allows diopters to be quickly attached and released from the front of the port. I keep all the accessories



*A shot from the MFO-1, allowing for a sharp crisp and easy to focus image*

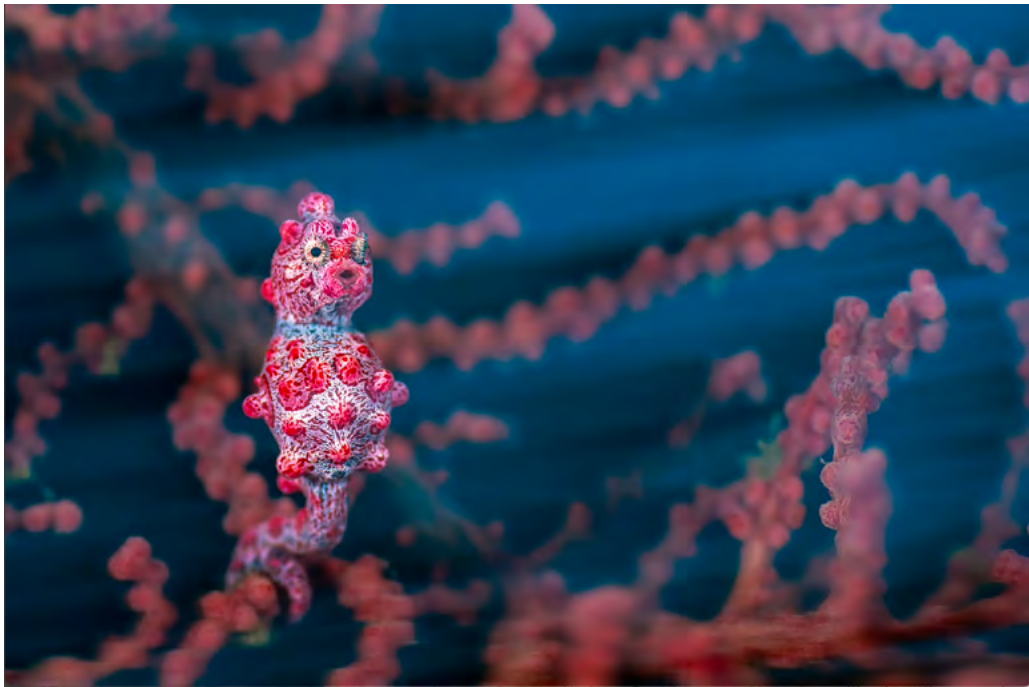
I want to attach to my macro port—such as the SMC, Vortex filters, ND filters, and the MFO—on bayonet mount adaptors in my pocket, making it easy to swap them out quickly underwater.

To use this system, you'll need to buy the bayonet mount and leave it permanently attached to your macro port. Then, purchase as many bayonet holders as you need. I use three since I never take more than that amount of accessories on a dive.

### Final Conclusion

This lens will no doubt be highly sought after. Priced at \$475 USD, it's a bargain compared to most underwater photography gear. Within the next year or so, it's likely to become a staple on many high-end macro setups.

What makes the MFO-1 special is that it enables you to capture images you couldn't before—without even realizing it's doing so. It enhances your macro shooting experience by making focusing faster and easier while delivering cleaner, sharper



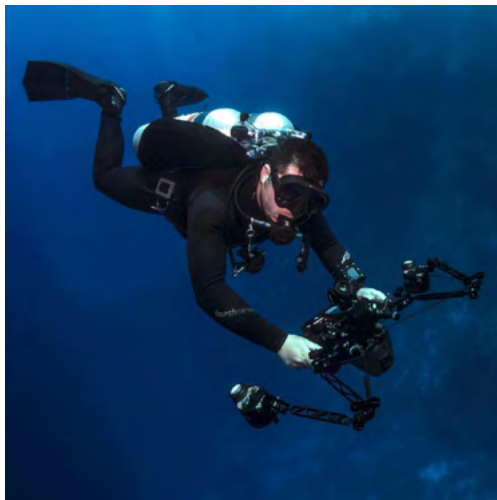
*A new take in magnification of a pygmy seahorse, easier to focus and shoot than every before*

images by reducing optical distortions and minimizing the amount of water between the lens and the subject. Yet, the magic of this lens is that it works so seamlessly that you might not even notice what it's doing.

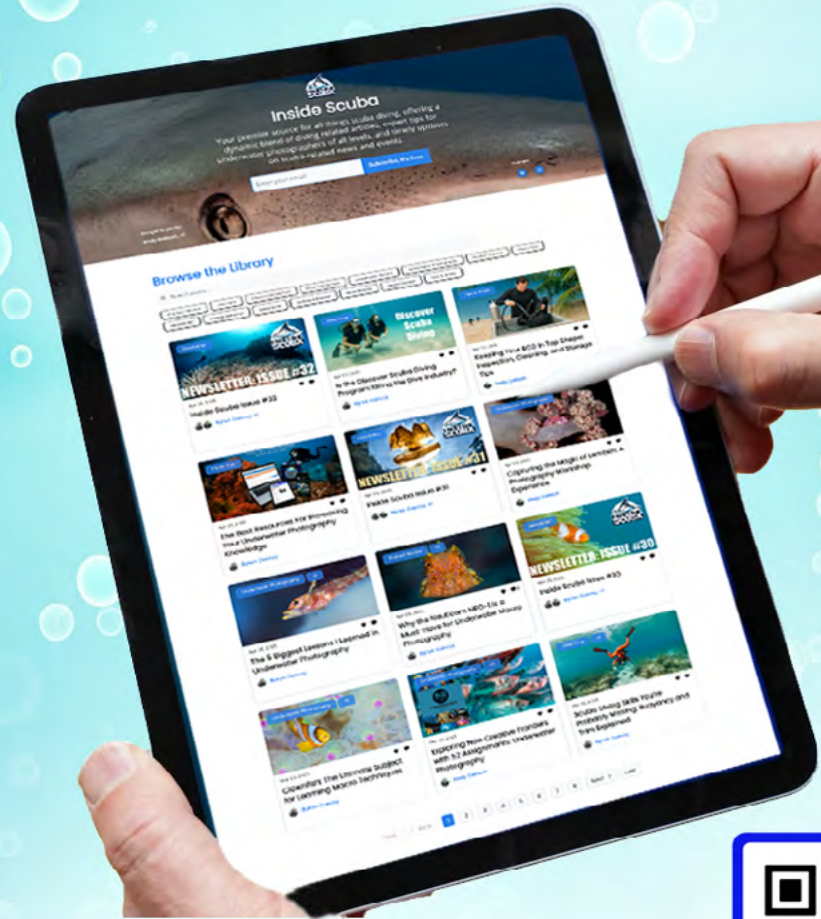
It's a fantastic lens—versatile, practical, and one that will undoubtedly improve both your shooting experience and your results, even if you can't quite put your finger on how.

A big thanks to Edward Lai, Ryan Canon, and Dr. Alex Mustard for bringing this optic to the underwater photography world.

**Byron Conroy**  
[www.insidescuba.online](http://www.insidescuba.online)



Your Premier Destination  
for Scuba Diving News,  
Tips, and Underwater  
Photography Expertise.



Subscribe for free!  
<https://insidescuba.online/subscribe>



# Marelux Apollo III 2.0 Strobes

by Henley Spiers

A Game-Changer For Continuous Shooting Underwater with Flash

Preamble: I don't get the opportunity to test underwater photography gear much. Time in the field is precious and usually spent in pursuit of a specific imagery or storytelling goal. I have to trust my gear intimately and there is no time or room for an unfamiliar addition which might not match the performance of my existing set-up. Over Christmas and downtime with family, I had a rare low-pressure moment in which I had the capacity to test out the Marelux Apollo III 2.0 strobe.

I undertook these tests with no affiliation to Marelux and no financial incentive. Marelux sent me the equipment for testing on a short-term loan basis and I was very clear in promising an honest review which did not pull punches. The only clause afforded was that Marelux could decide whether or not to make my views public.

It's useful for context to understand my history with underwater strobes as this is the base of experience I will compare with the Marelux Apollo II 2.0 strobe. Over the last 10 years I have actively used the Sea & Sea YS-D1, Sea & Sea YS-D2,



Inon Z240, Inon Z330, Retra Flash Pro X and ONEUW 160x. At present, the main strobes I use are the Retra and ONE UW models.

The strobe comes in fairly large, protective packaging cube with foam inserts. This is a nice touch and offers a reassuring way to transport the strobes...although at times luggage restrictions might mean I can't bring the strobe in the packaging cube as two of them takes up too much



*Marelux Apollo III 2.0 mounted to my housing - I primarily shot them with a Nikon D850 paired with either 60mm lens or the 28-70mm lens and a Nauticam WACP-1.*

space in the suitcase. Nevertheless, this is a very nice touch and one I have not seen from any other strobe manufacturer.

The layers of protection continue with special rubber covers for each of the lumilink receivers on the strobe, and a screwed on plastic cover which protects the dials at the back of the strobe. These features are also different to any other underwater strobe I have handled. The protective cover which covers the dials and battery compartment is a bit of a faff to put on and remove but you would only do so when storing or packing

it. It weights 117g and if pressed on luggage weight I might be tempted to remove them for travel.

The strobe has an industrial, high quality feel to it: metallic and sturdy. The weight and size of the Marelux strobe puts it in the bigger strobe category. It is comparable to the ONE UW 160x, roughly similar weight and only moderately smaller in length. The downsides of this are the added weight for travel and transport, and the fact that the size of the strobe would make it harder to slot into tight lighting set-ups such as in some macro or some CFWA shots. The

upside of a larger strobe usually comes in the the form of quality of light, strength of light, and increased battery power.



The front of the strobe has 3 flashlights - it does not use a circular tube method. I pressed Marelux on their decision not to use circular tubes as this does appear to be the most sought after design in the market at present. According to Marelux's testing during product development, the addition of a high quality diffuser will match the light output softness of circular tubes. Marelux preferred to use straight tubes as they believe they have a longer lifespan and are able to deliver higher light output, as well as opening up better possibilities for continuous flashing. My own side-by-side testing of strobes would yield more insight to this aspect and is continued later.

## Functionality and Ergonomics

The power dial goes from 1 to 12 - the numbers are written in a small font. The power dial shifts quite easily between positions and I would prefer if it did so with a stronger click into each power setting. This would be even more useful when your tactile sensitivity is reduced through cold water and usage with gloves.

Annoyingly, the side dial functions are listed on a different area to the actual nob. This means



that when you change function you need to then angle the strobe and your point of view to see what the dial position correlates to. With familiarity, this will become second nature and I quickly learnt that dialling it all the way took me to MTL and two clicks took me to M mode.

The battery compartment has a large unlocking device which would be easy to use even with numb and cold hands. I was reassured to find a double O-ring seal to the battery compartment. I would like to know if this compartment sealed off from the rest of the strobe in a manner that would

limit damage if there was water ingress to the battery area.

The focus light is turned on by pressing the mode button down. At first this was confusing as it is different to other strobes but once you are familiar it works well. The focus light sits centrally and has a white and red light options, with two power settings for each.

The 120° dome diffusers are made of soft plastic and an integrated lanyard. I really like this feature. Operating in dynamic environments and on shoots from many different types of boats, I have a

history of losing diffusers or cracking them. The lanyard and soft nature of the dome port mean this would be far less likely (and therefore costly)! I do suspect my issues with dome diffusers are not widespread, however, as there is less chance of these failures when operating from the comfort of dive resorts and liveboards.

### **Function modes on the strobe are Test, M, Auto Sync, M-HSS, MTL.**

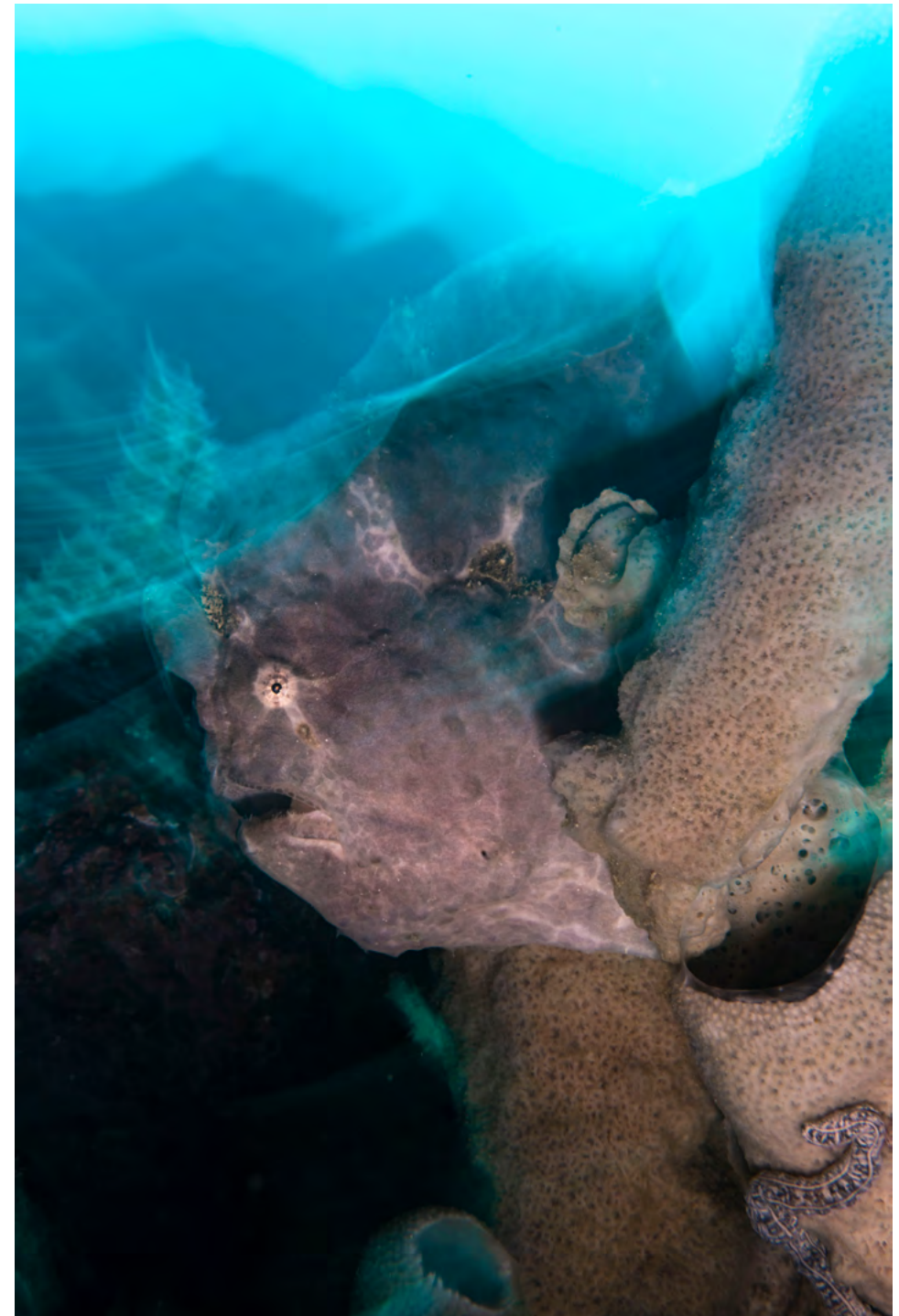
MTL is a crucial and different mode when using the Marelux strobes. In order to improve the strobes performance when it comes to continuous shooting, Marelux have designed MTL mode. In a very important difference to other strobes, you should not use M mode for continuous shooting but MTL.

This is a vital difference, especially for my style of shooting. Typically, my camera would always be in continuous shooting mode, and I would then have the option of shooting a single frame, or, when something exciting is happening, holding the shutter down and spraying a continuous stream of shots. On all other strobes I have used, I would remain in M mode whether I was shooting singles or continuous. Marelux has changed that method and the question is do the advantages outweigh the obvious disadvantage of having to click between different modes?

In MTL, the power output is approximately half what it would be if operating in M mode. So roughly speaking, full power (12) on MTL is about half power (6) in M.

Usually, for wide angle, I am between a quarter and half power on strobes. With the Marelux strobes, this meant that I could usually get the power I needed in MTL mode. This meant that I could always be ready for continuous shooting and, underwater, I found the strobes followed the consecutive shots well in terms of power delivery. It is an inconvenience to suddenly have to think in terms of M and MTL...and with power signifying different things in each, there is some mind-bending required to think about what a power number means in either M or MTL.

People talk a lot about the maximum power of strobes but I am just as interested in how low they can go. When shooting in dark, cold water environments you have to boost your exposure settings to display the background environment (lit by natural light not strobe). This can be very difficult to balance with strobes as they are often too bright and hard to control (you often need to stop down your aperture to control for this). Although I have not tried them in coldwater yet, I am excited at the fact that MTL means the low power settings on the strobe are even lower than M...meaning they might be good strobes to use to create tasteful, delicate



light on coldwater dives.

As far as maximum power, I found the strobes had more than enough power for me when shooting wide angle scenes...in fact I never needed to use anything like full power on wide angle. I did make use of the full strobe strength, flicking over to M and maximum power, when shooting a creative, slow shutter image of a frogfish with a single strobe in the late afternoon (sky was bright but overcast). To overcome natural light, these type of creative shots can need very strong strobe power and I was pleased with the result. In this case, I could make full use of my creativity and the strobe delivered what I needed.

The strobes are powered by 3x18650 lithium batteries and use a colour indication light to tell you how much charge remains. The light is easy to see and keep track of. Blue (80-100%), green (60-80%), yellow (40-60%), purple (20-40%), red (0-20%). I didn't push the strobes crazy hard in terms of number of dives and flashes but I never went below a green light. Battery life is a strong point for these strobes and an area of great reassurance when shooting. Even if I had a very big day of shooting, I don't think I would be fretting about battery changes on the strobes.

## Light Colour and Quality

I used the strobes 120° yellow diffuser designed for blue water and was pleased with the colour balance achieved in my images. It felt neither too warm or cool in terms of white balance.

Quality of light is hard to define and I would like more time with the strobes to give a final assessment. I think that strobes are a tool, not a magic wand, and for as good as a strobe may be, the role of the photographer in using that tool to shape the light is actually just as important (maybe even more important). What I can say so far is that I felt like I could achieve the look and light I wanted with these strobes... which is a good sign.

## Comparison Tests

In the office, I performed side by side tests of the Marelux Apollo III 2.0 against my existing strobes: Retra Flash Pro X and ONEUW 160X. I wanted to truly understand how the continuous shooting compared and these test also gave a good perspective on light colour and diffusion.



## Test conditions:

- Strobes placed 1 metre from wall.
- Camera body, lens and settings remained the same throughout: Nikon D850, Nikon 16-35mm @16mm, f/11, 1/250, ISO 100.

## • Camera set to continuous high shooting at 7 frames per second.

- Same fibre optic cable used for all tests.
- Batteries fully charged prior to tests. Eneloop Pro AA used with Retra strobes.

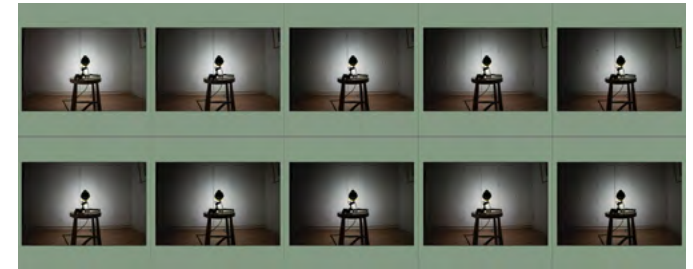
- Diffusers used on all strobes.
- Strobe Apollo III 120 Degree Diffuser (Yellow) on Marelux strobes.
- Retra wide angle diffuser on Retra X Pro.
- White diffuser on ONEUW.



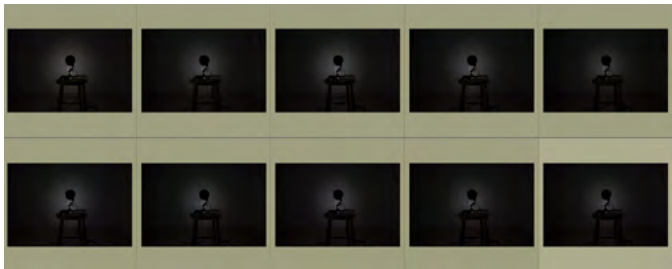
*Marelux Apollo III 2.0 at MTL 6 power setting (this is roughly equivalent to 1/4 power)*



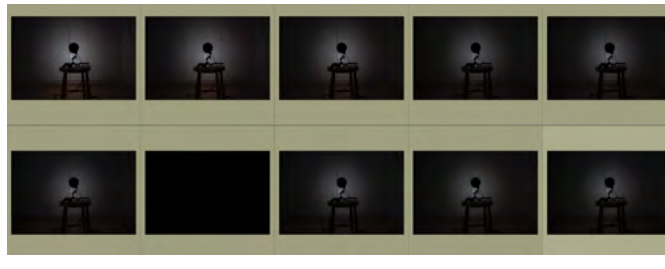
*Marelux Apollo III 2.0 at MTL 9 power setting (this is roughly equivalent to 1/3 power)*



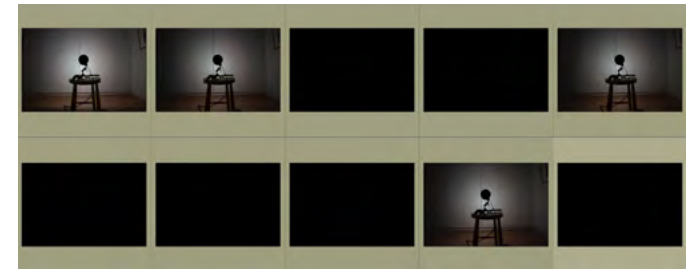
*Marelux Apollo III 2.0 at MTL 12 power setting (this is roughly equivalent to 1/2 power of the strobe but the highest power setting possible in MTL mode)*



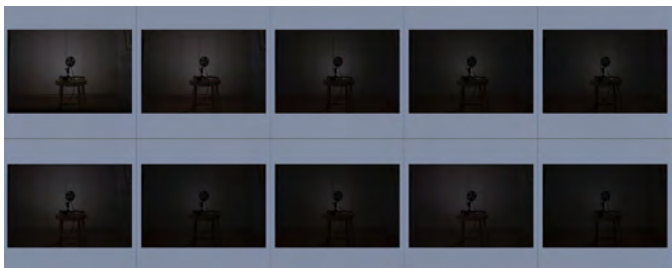
*ONEUW 160x at -4 power setting (1/16th power according to manual)*



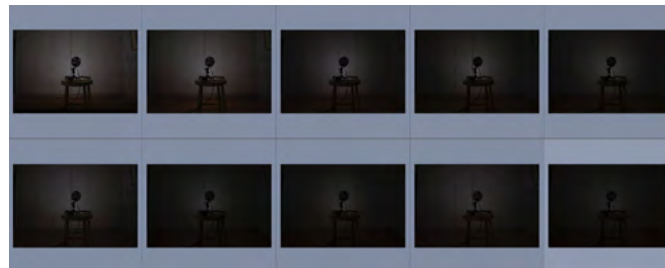
*ONEUW 160x at -3 power setting (1/8th power according to manual)*



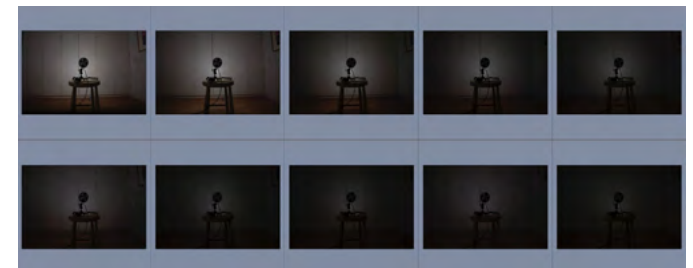
*ONEUW 160x at -2 power setting (1/4th power according to manual)*



*Retra X Pro at 3 (power dial goes from 1 to 100)*



*Retra X Pro at 6 (power dial goes from 1 to 100)*



*Retra X Pro at 12 (power dial goes from 1 to 100)*

## Key observations:

Continuous firing: Marelux Apollo clearly outperforms both other strobes and is able to maintain continuous delivery of light even at higher power outputs.

Light diffusion: Marelux Apollo diffuses light less evenly than the Retra strobe. The wide and even light diffusion of the Retra strobe is impressive. Light diffusion between Marelux and ONEUW is comparable meaning that this is not purely related to the use of straight or circular tubes.

It was this testing which really opened my eyes to the potential of the Apollo strobes. Imagine yourself witnessing a moment of fast-moving hunting behaviour underwater, with the Marelux strobes you could fire continuously and stand a far greater chance of capturing the peak of the action. It could also be applicable in macro behaviour scenarios where a lot of strobe power is needed. In addition, I would find it useful for split level imagery where we naturally close up our aperture and need higher strobe power - by shooting continuously we stand a better chance of bagging the perfect frame. It is a specialist application which will be of less concern to underwater photographers focussed on more stationary subjects, but for me it is a potential game-changer.

## Lumilink or Wireless Flash Triggering

Marelux have brought an intriguing new innovation to their strobes with Lumilink. Two receptors are located on either side of the strobe. These offer you the opportunity of not relying on fibre optic cables to trigger the strobes. To make it work you need a Lumilink signal device which



attaches to the top of the housing where the fibre optic cable connectors go. You press and hold the power button on the transmitter for 2 seconds to turn it on. To activate the strobes for Lumilink you need to press and hold the mode knob for 2 seconds, and after hearing four “beep” sounds, the wireless trigger mode will be activated.

Turning on the functionality works well. As far as triggering, the Lumilink works perfectly as long as the Lumilink has a clear line of view to the receptors on the side of the strobes. This is very sensitive, you need to imagine a straight line going from one to the other. I had instances where I adjusted the strobe position slightly, and the signal was then blocked by the strobe arm, meaning it did not fire. Lumilink solves one problem but creates a new one. Fibre optic cables fire the strobes 100% of the time with only the mild inconvenience of having a wire connection. Lumilink would fire the strobes maybe 90 to 99% of the time but suddenly I had to worry about whether the connection was intact. When shooting underwater, I need to be able to quickly adjust my strobe position and my hand position without worrying if the strobes will fire or



not. For this reason, at this moment, I prefer to have 100% certainty and a cable, rather than no cable and a new worry about visibility of Lumilink to the receptors.

What about if you remove the strobes from the camera housing and arms? This for me was one of the most intriguing potential uses of wireless triggering. In a pool, in the very late afternoon, in relatively low light, I tested the connection and found that the furthest distance I could successfully

fire the strobe from was 2 metres. This was a little disappointing. I had hoped to be able to take a much bigger step back from the strobe and still fire it. Marelux argue that the distance possible for a Lumilink connection will increase in darker environments but I did not have the opportunity to test this for myself.

Use of off-camera lights and flashes, especially in wide angle photography, usually works best when you hide the light behind a person or feature. The Lumilink relies on direct line of sight with the strobe receptor, meaning that this type of use is also compromised (you can't hide the strobe and trigger it).

What would be interesting to see developed is a cable with receptor which could be attached to the strobe. This would then function more like other off-camera strobe trigger whereby the strobe attached to a receptor is discreetly placed within communication distance with the triggering strobe or, in this case, Lumilink transmitter.

I could see Lumilink having more value in macro photography, especially with a snoot, whereby the strobe could be detached and fired with creative lighting effects but within close proximity to the camera (and being careful to keep Lumilink and strobe 'seeing' each other.

In the past, Jade and I have also swam together with one of us shooting whilst the other did lighting with a detached strobe in snoot - we used this for fast-moving animals like juvenile boxfish. The Lumilink might be used for this kind of work too (although you would have to be very vigilant about the connection for triggering).

I wish the fibre optic cables Marelux supplies came with a coiled design so that they can be stretched and shortened depending on how wide or

tight you want to have your stride arms. The straight cable means you have to commit to a set size ahead of a shoot, and you then usually have lots of slack in the cable which needs to be managed somehow (I wrapped it around the arms).

### Headline summary:

Marelux have built a strobe which aims to introduce two innovations to the market: wireless flash triggering and much improved continuous shooting performance.

The continuous flash triggering is jaw-droppingly good, completely outperforming my existing strobes.

To benefit from this you must make use of their MTL mode and use this as your default configuration.

The wireless flash triggering is good but not 100% reliable - I would still rather rely on fibre optic cables.

The overall performance of the strobe in terms of power and light quality feels good. Longer term testing in more situations and places will reveal more on this.

The light diffusion could be improved - my Retra strobes cast light in a far more even and soft way.

The battery reserve is excellent.

The ergonomics could be improved and be more intuitive.

For photography which involves fast-moving behaviour (e.g. baitballs or diving gannets or macro animal behaviour) the continuous shooting of the Marelux Apollo III 2.0 may help you capture shots you might otherwise miss. It could also be especially

useful for continuous shooting in split-level imagery which requires a closed aperture and higher flash power.

For much of underwater photography I do, the Marelux Apollo III 2.0 would be a very useful addition.

## Henley Spiers

*Henley Spiers is a renowned underwater photographer, writer, and expedition leader who has fast become one of the most highly decorated wildlife image-makers in the world. An avid waterman, Henley is passionate about all aquatic realms, from storytelling marine protection in the frigid waters of Scotland, to venturing 500 metres deep on a scientific mission in the Indian Ocean. Whether it be swimming alongside hunting orcas or witnessing the feeding behavior of tiny blue sea dragons, Henley has a proven ability to deliver the images which do justice to the wonder and threats faced by the natural world. Henley was honored to be the first ever Storyteller in Residence for Oceanographic Magazine.*

[www.HenleySpiers.com](http://www.HenleySpiers.com)



# David Fleetham

with Peter Rowlands

*I think it's fair to say that both you and I are 'of a certain age' having learnt on film and transitioned to digital. Do you think today's digital only underwater photographers have missed out or benefitted?*

They've certainly benefited. It's hard to imagine going back to the days of just 36 exposures per dive—not to mention the uncertainty of whether the image in my mind had actually been captured on that tiny strip of chemically treated film. The instant gratification of digital photography—being able to say, “That’s it, I got the shot,” and immediately move on to the next subject—is truly invaluable. And if the shot isn’t quite right, I can keep shooting until it is.

What newer photographers may have missed out on, however, is the tactile satisfaction of physically discarding a slide that didn’t make the cut—dropping it into an actual trashcan, rather than simply dragging a bunch of pixels to the virtual one.

*Did anything in your upbringing or education indicate that underwater photography would become such a big part of your life?*

While attending high school in Ontario, Canada, I had little interest in photography on land. My parents owned cameras and often captured family moments on Kodachrome, so I had a general awareness of the photographic process, but it didn’t spark a passion at the time.

I became a certified diver through an unusual setup—a bicycle shop had a small collection of scuba gear tucked away in the back. My checkout dive took place in a cold, man-made lake, clad in a wetsuit. After graduation, I worked and saved to join my best friend, Peter Fiell, in the Grenadine Islands of the Caribbean.

Inspired by the films of Jacques Cousteau, I felt a strong, almost unexplainable urge to return home with underwater photographs of my own. The local camera store recommended a Nikonos camera, which was standard for underwater photography at the time. But I was more drawn to the idea of using an SLR—something that allowed me to



*A split image of a diver with an Ikelite camera housing system below a dive vessel on Finger Reef, in Apra Harbor, Guam, Micronesia, Mariana Islands, Philippines Sea. Canon EOS R5, Ikelite housing, 8-15mm lens at 15mm. Two Ikelite DS161 strobes. 1/5000th sec @ F10. ISO 1000.*



*A California sea lion, *Zalophus californianus*, playing in a kelp forest off Santa Barbara Island, California, USA. Canon EOS 5D, Ikelite housing, 15mm lens. Two Ikelite DS161 strobes. 1/60th sec @ F11. ISO 640.*

see exactly what I was focusing on and ensure sharp results. I ultimately chose a Minolta paired with an Ikelite housing, and that decision marked the true beginning of my journey into underwater imagery.

***Did diving and underwater photography start together and in terms of learning were you self taught?***

After spending three months in the Caribbean, I returned to my small, landlocked hometown

and soon decided to relocate to Vancouver—my birthplace and, more importantly, a city with access to an ocean, even if a much colder one. Growing up, my family subscribed to National Geographic, and I would study the underwater images in its pages, along with those in various dive magazines. These visual inspirations continually pushed me to improve my own photography beneath the surface. In that sense, I was entirely self-taught.

I quickly landed a job at a local dive shop and



*A giant Pacific octopus, *Enteroctopus dofleini*, and a diver (MR) on a wall in British Columbia, Canada. Canon EOS R5, Ikelite housing, 100mm macro lens. Two Ikelite DS161 strobes. 1/125th sec @ F14. ISO 160.*

seized every opportunity to get in the water. Gary Mallander, the shop manager who hired me, had recently taken renowned underwater photographer David Doubilet diving to document marine life in the Pacific Northwest. Doubilet's April 1980 article

in National Geographic, titled “Unexpected Glory in Canada’s Cold Seas,” sparked a deeper curiosity in me to shoot the Pacific Northwest.

Over the next six years, I had the good fortune to dive and photograph marine environments ranging from Washington’s San Juan Islands to the northern tip of Vancouver Island and up to the Queen Charlotte Islands. During that period, I transitioned from using a Minolta to a Canon F1 equipped with an optional enlarged viewfinder—widely considered one of the best systems available at the time. That camera was in my luggage when I moved to Hawaii in 1986, marking the beginning of a new chapter in both my diving and photographic journey.

***Was your early underwater photography driven by the need to communicate?***

Getting scuba tanks filled was the common thread that brought underwater photographers together at the dive shop, and it didn’t take long for me to become part of that community. Once or twice a month, we would gather for slideshow nights to share our latest work, exchange ideas, and enjoy each other’s



Columbia was always a quest for unique marine subjects. I was fortunate to be part of a generous and knowledgeable dive community that openly shared locations known for specific wildlife encounters. This led me to explore dive sites up and down the coast in search of sea lions, wolf eels, gorgonian corals, giant Pacific octopuses, and those rare days with 100-foot visibility.

My early years in Hawaii followed a similar path. As I became more familiar with my new surroundings, I made it a point to dive across all the islands, seeking out encounters with Hawaiian monk seals, schooling hammerhead sharks, and various marine mammals that frequent these subtropical waters.

***Were you operating in a bubble or were you part of a group of underwater photographers in those days?***

I’ve been fortunate to connect with other photographers wherever I’ve lived. In Vancouver, I found a strong sense of community through the dive shop where I worked and through word-of-mouth—well before the era of cell phones and Facebook groups. During my decade there, I formed lasting friendships, many of which continue today as we reunite for dive trips around the world.

When I moved to Maui in 1986,

company. We frequently chartered boats or organized trips to dive resorts along the coast, building both our portfolios and lasting friendships. Many of those early connections have endured, and I’m still in touch with several of those photographers to this day.

***At what point did you find that your images had a value financially?***

In the beginning, my primary goal was to land a cover on Canadian DIVER magazine. It was the highest-paying opportunity at the time and served as my

introduction to the potential of selling underwater images. After relocating to Maui in 1986, I began establishing relationships with stock agencies across the United States, and eventually expanded those connections internationally. I was fortunate to be actively involved in three decades of strong and consistent photography sales.

***Did this new found possibility of value lead you to going on subject driven dive trips to shoot rare creatures underwater?***

Cold water diving in British

the community was small and close-knit, working in that era of film. As my work began to gain more exposure and appear in publications, my network naturally expanded. Visiting photographers often reached out ahead of their trips for local insights, and with each new project, those connections grew into a broader, more collaborative community.

Prior to relocating to Guam, I had the opportunity to meet many photographers from around Micronesia during trips to the island of Yap, where I helped host guests during MantaFest—a two-week photography workshop organized by the Manta Ray Bay Resort. On several returns to Hawaii, I would stop in Guam to dive and co-lead seminars with Tim Rock, coordinated by Lee Webber of MDA (Micronesian Divers Association).

Since settling in Guam, I've continued to build strong relationships within the local underwater photography scene. One passionate member of the community, Steven Wolborsky, recently founded the Guam Underwater Photographic Society. I'm excited to support its growth and contribute in any way I can.

*A commercial hard hat diver (MR) welding a massive wave energy buoy off Kaneohe Bay, Oahu. The 40-kW experimental buoy, employs the bobbing motion of the buoy to drive an electrical generator, that then sends power to the island via underwater cable, Hawaii. Canon EOS 5D MkIV, Ikelite housing, 16-35mm lens at 35mm. Two Ikelite DS161 strobes. 1/100th sec @ F11. ISO 640.*

### *How did your work with National Geographic come about and was it all you hoped?*

The late Jim Watt was an outstanding underwater photographer and a generous mentor to many—particularly during the pivotal transition from film to digital photography. Based on the Big Island of Hawaii, Jim and I would often meet there to take advantage of the calm waters off the Kona coast, renowned for its abundance of marine mammals.

At one point, National Geographic commissioned Jim to photograph the installation of an experimental wave energy buoy off the North Shore of Oahu. The assignment was postponed several times, and when the final date was confirmed, Jim happened to be in Indonesia on an extended trip. He graciously passed the opportunity on to me—a gesture for which I remain deeply grateful. That project introduced me to a world where budgets for travel and production appeared nearly limitless.

Of course, the media landscape has changed significantly since then, particularly with the decline in print readership and National Geographic's acquisition by Disney. Nonetheless, that





*Reef manta rays, Mobula alfredi, attempting to mate, Yap, Micronesia. This species was previously Manta alfredi.  
Canon EOS R5, Ikelite housing, 8-15mm lens at 15mm. Two Ikelite DS161 strobes. 1/400th sec @ F11. ISO 320.*

assignment marked a highlight in my career and remains one of the most memorable opportunities I've had.

***You moved to Hawaii in 1986. Was this a deliberate career move and what does Hawaii offer in terms of diving, conditions and subjects all year round?***

A diving instructor friend from Vancouver assembled a group of investors to purchase Central Pacific Divers in Lahaina. They developed a small boutique hotel and relocated

the groups 48-foot sailboat to Maui. In need of someone to live aboard the vessel and work at the dive shop, they offered me the position — and I accepted quickly. I thought it would be a great way to spend a year.

The sailboat was moored in sixty feet of water just offshore from town, and during whale season, I was often awakened in the middle of the night by the haunting, powerful songs of humpback whales. At times, the sound was so intense it caused the hull to vibrate.



*This great white shark, Carcharodon carcharias, was photographed just below the surface off Guadalupe Island, Mexico.  
Canon EOS 5D, Ikelite housing, 16-35mm lens at 22mm. Two Ikelite DS161 strobes. 1/200th sec @ F11. ISO 320.*

That one year passed quickly—and so did the sailboat, the dive shop, and eventually the hotel itself, which was tragically lost in the devastating Lahaina fire shortly before I left the island.

Over the course of my 38 years on Maui, I worked with several dive companies and earned my U.S. Coast Guard captain's license. As photography became my full-time career, the dive charter business gradually became part of my past.

Hawai'i is often overlooked as a

premier dive destination, frequently seen instead as a gateway to the South Pacific. While it may not have the same reputation as more tropical locales, diving in Hawai'i offers its own unique advantages and challenges.

Diving is possible year-round, although the waters are considered subtropical, with temperatures occasionally dipping into the low 70s°F (around 21°C). Due to the islands' extreme isolation — rising as volcanic peaks in the heart of the Pacific Ocean — the range of marine



*Pygmy killer whale, Feresa attenuata, also known as the slender blackfish or the slender pilot whale, Hawaii. Canon EOS 20D, Ikelite housing, 10-20mm lens at 10mm. Two Ikelite DS161 strobes. 1/125th sec @ F9. ISO 200.*

life is limited to species that could reach these remote shores. However, this isolation has led to a remarkably high percentage of endemic species, found nowhere else on Earth.

In addition to its distinctive biodiversity, Hawai'i offers exceptional opportunities to encounter marine mammals and experience the increasingly popular blackwater diving, making it a destination well worth exploring for underwater photographers and divers.

*You must have been one of the most successful stock photographers in your day. Was it the lucrative wild west that has now all but dried up or is there hope of a new level of value?*

Looking back, it truly felt like the Wild West. If I knew then what I know now, I would have approached certain things differently—but that's all water under the bridge.

In the days of film, producing a strong

underwater image was a real challenge. With only 36 exposures per roll and no way of knowing if anything turned out until days or even a week later, the process required both skill and patience. The advent of digital photography has dramatically changed the landscape. The volume and quality of underwater imagery have increased exponentially, making it far more accessible to capture compelling shots.

Like any product, the sale of images is subject to the laws of supply and demand. As the supply of high-quality underwater photos has surged, prices have inevitably declined. Having worked in this field for over 40 years, I still find it worthwhile. However, for someone just entering the industry today, it would be considerably more difficult to justify the expenses relative to the potential income in today's market.

*How has your equipment use developed over the years. Are you dominated by it or is it just a tool for the job?*

The camera, strobes, and housing have always been essential tools of the trade. In the early days, there were only a few systems that dominated the market—tools of choice for serious underwater photographers. Back then, everything was manual: focusing the lens, advancing the film frame by frame.

Things began to change with the advent of autofocus, and then transformed dramatically with the rise of digital photography. Over the past 23 years, I've upgraded to new camera models more times than I can count. Each time, I think, this is it—how could it possibly get better? And yet, somehow, it always does.

That said, I feel that way now with my current

Canon R5. The image quality is outstanding, and for the first time in a long while, I might actually skip the R5 Mark II. However, for those who shoot fast-moving subjects—like birds in flight—the Mark II is definitely worth considering.

Do you feel that underwater photography so far has done a good job in helping awareness of our oceans or are there better ways or techniques to spread the word.

Underwater imagery has long served as a vital avenue for raising awareness among those who are landlocked or may never experience the ocean firsthand. As the volume of underwater photography has grown exponentially, it has helped bring the wonders of the marine world to a broader audience—many of whom might otherwise never glimpse the beauty that lies beneath the waves.

Social media platforms and publications like this one continue to amplify that message, shining a spotlight on the ocean's fragile ecosystems. We can only hope that this growing visibility inspires meaningful change and a collective commitment to protecting the health of our oceans—upon which all life depends.

***You are a fan of blackwater photography underwater. Does this appeal technically, photographically or marine biologically, or all three?***

Traditionally, new divers are often advised to master their fundamental diving skills before attempting underwater photography—and with good reason. Although today, it's not uncommon to see divers with limited control or poor buoyancy skills attempting to manage complex camera systems. However, this is something I've never



*Komodo dragons, **Varanus komodoensis**, are the worlds largest lizards. Rinca Island, Komodo National Park, Indonesia. Canon EOS 40D, Ikelite housing, 10-22mm lens at 10mm. Two Ikelite DS161 strobes. 1/250th sec @ F11. ISO 200.*

observed on a blackwater dive.

Drifting miles offshore at night, suspended in the open ocean with a group of divers and a only a few lights tethered to a line, is not an environment suited to everyone and especially not a novice. Blackwater diving is one of the most demanding conditions in which to create an image, but when everything aligns and the shot comes together it is most rewarding. That's what keeps drawing me back.

It's not a pursuit for everyone who's ever exhaled through a regulator. But for those who venture into this alien-like realm—right here on our own planet—it offers a truly otherworldly perspective.



*These two bigfin reef squid, **Sepioteuthis lessoniana**, were photographed at night in the Philippines. These are also known as oval squid.*

*Canon EOS R5, Ikelite housing, 100mm macro lens. Two Ikelite DS161 strobes. 1/160th sec @ F22. ISO 160.*

*Would you like to offer advice to anyone today who wants to be involved full time and earn a sensible living from underwater photography or is it best to keep it in it's box and stick to the day job?*

The phrase “a sensible living” means something different to everyone. If the ocean is your passion, I would never discourage you from pursuing your vision—whatever shape that may take. Personally, I won't be traveling to my next diving destination on my private jet. In fact, I don't plan to retire in the traditional sense at all. I'll simply continue photographing the ocean and building my image library. When my partner, Jennifer, and I aren't immersed in reliving what we saw on our last dive, we're planning for the next one.

If your goal is that private jet, it's worth considering whether today's image licensing and marketing landscape is the right path. There are many other avenues to building wealth—ones that could still allow you to explore the underwater



*This green sea turtle, *Chelonia mydas*, an endangered species, is having it's shell cleaned by a school of goldring surgeonfish, *Ctenochaetus strigosus*, off Maui, Hawaii. Canon EOS 5D, Ikelite housing, 15mm lens. Two Ikelite DS161 strobes. 1/100th sec @ F11. ISO 160.*

world with a camera in hand. Choose your path thoughtfully.

*David, thank you very much for taking the time to provide such informative and insightful answers and also for your extensive contributions to the magazine over many years.*



**Peter Rowlands**  
[peter@uwpmag.com](mailto:peter@uwpmag.com)

**David Fleetham**  
[www.davidfleetham.com](http://www.davidfleetham.com)



*alam batu*  
SINCE 2004



**ALAM BATU BEACH BUNGLAOW RESORT | BALI | INDONESIA**

- DIVE GUIDES EXPERIENCED IN WORKING WITH PHOTOGRAPHERS
- LARGE CAMERA ROOM SUITABLE FOR PHOTO GROUPS
- BOAT AND SHORE DIVING WITH NITROX AVAILABLE
- ALL-INCLUSIVE DIVE, SPA & TOUR PACKAGES

[INFO@ALAM-BATU.COM](mailto:INFO@ALAM-BATU.COM)

# Fluoro fun

## with The Backscatter Team

Fluorescence (often called “fluoro”) is a super fun way to get creative and weird with image making. Fluoro offers a unique and striking look that stands out from conventional images bringing a fresh and vivid twist to your work.

Fluorescence occurs when a subject absorbs light at a specific wavelength then emits light back as a different color. The result is an extremely vivid and neon look, which makes the subject appear completely differently than under white light. For example, some green plants or algae typically appear bright red when fluorescing. This is the same way a black light poster works when lit with the right kind of light. It’s easiest to see fluorescence in dark conditions with no ambient light, which is why fluoro photography and video are typically done at night.

Compared to shooting with normal white light, fluorescence transforms ordinary subjects making them appear otherworldly.

It is important to not confuse fluorescence with critters that “glow in the dark”, also known as bioluminescence. Fluorescence requires a specific type of

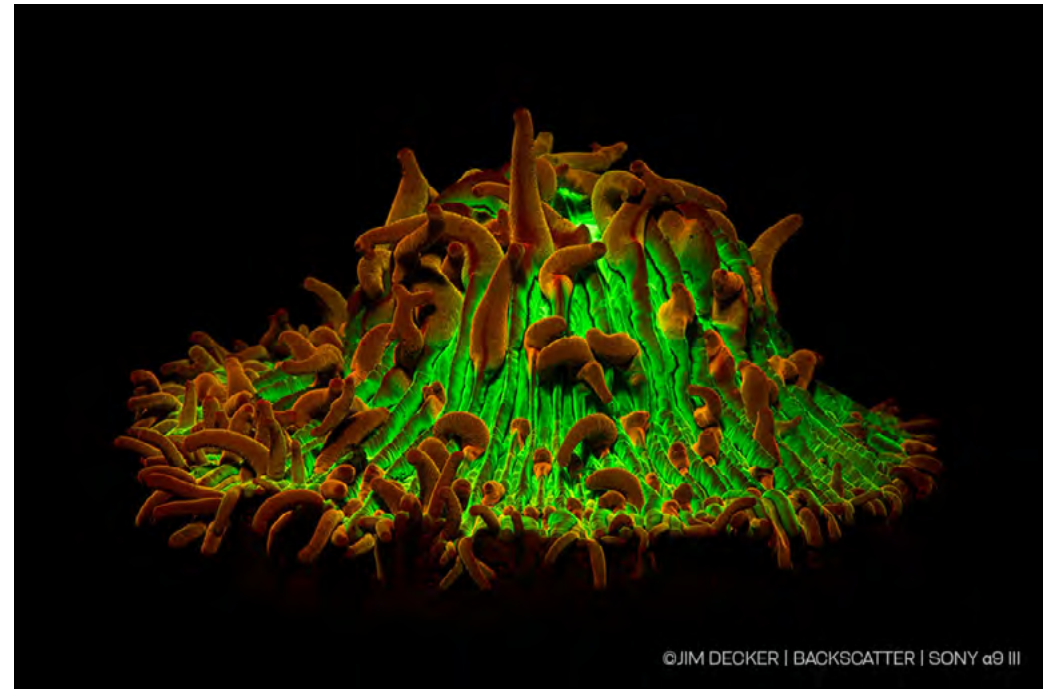
light in order to be seen, while bioluminescence is a chemical reaction that generates light on its own, without any external light source. Think of it as the difference between a black light poster and a glow stick.

Shooting fluorescence is a fantastic creative outlet for both photo and video. The bold and vivid look makes ordinary subjects look captivating. This trippy effect gives you access to a brand new color palette that isn’t available with normal white light. The striking imagery created with fluorescence instantly makes it stand out from the crowd in a portfolio or competition.

Most importantly, shooting fluoro is good plain fun. You never know what might fluoresce, even some critters of the same species might fluoresce differently. You never know what kind of image you might capture!

You don’t even need a camera to enjoy hunting fluorescent critters, making it a perfect way for non-photographers to add a new, fun twist on night diving.

Keep in mind that not all things fluoresce, and discovering what does is half the fun!



©JIM DECKER | BACKSCATTER | SONY a9 III

*Fluoro images are a bold way to create images using a completely different color palette.*

*Sony a9 III | Sony 90mm Lens | 1/1,600 | ISO 1,600 | f20*

*You never know which subjects might fluoresce, making critter hunting more fun than ever.*

*Sony a9 III | Sony 90mm Lens | 1/320 | ISO 400 | f16*



©JIM DECKER | BACKSCATTER | SONY a9 III

With the Backscatter Fluorescence System, shooters of all skill levels can explore fluoro photography, using tools designed to capture bold, psychedelic fluorescence imagery. Here we will break down each component of Backscatter Fluorescence System and describe their specific job in capturing fluoro imagery.

### Excitation Filters:

Excitation filters transform a normal flash or video light into a blue light, capable of both seeing and capturing fluorescence. The blue light emitted with the filter reacts with the subject causing it to glow. Blue light is safer to look at and more effective at producing fluorescence than UV light.



### Yellow Barrier Filters:

Yellow barrier filters attach to ports, lenses, and filter mounting systems. Since yellow is the opposite of blue on the color wheel, the yellow barrier filter blocks out blue light, acting as a barrier. This way only the bright, neon fluorescence is visible, with no blue light in the image or video.



The Backscatter Yellow Barrier Filter Dive Mask makes finding subjects easier by blocking blue light, leaving only the glow of fluorescent critters.



*Believe it or not, this fluoro seahorse image was shot during the day. This was made possible by the Sony a9 III's global shutter, which has no flash sync speed limits. The faster shutter speeds allow you to eliminate ambient light while still using settings suitable for fluorescence. Sony a9 III | Sony 90mm Lens | 1/1,250 | ISO 3,200 | f11*

### Best Settings

To capture fluorescence images, we will need settings that will let in plenty of light to boost the fluoro effect. Here are settings and shooting tips that will help capture bold, high contrast fluoro images.

**Use Close Focusing Lenses:** Lenses with short working distances, such as macro lenses, will get your camera and lighting closer to the subject, creating a stronger fluoro effect.

**Aperture:** Use a more open aperture in the range of  $f8-f11$ . This will allow more light to reach the sensor and maintain a strong depth of field. Use these apertures for both photo and video.

**Photography ISO Settings:** ISO is largely dependent on your subject. Animals without eyes, such as corals and anemones, tend to have stronger fluorescence and can be captured using ISOs between 400-800. Subjects with eyes such as fish, shrimp, and nudibranchs tend to have a weaker fluoro effect, and ISOs between 1600-3200 are common. Stronger fluorescing subjects of either type can use lower ISO ranges than suggested.

**White Balance:** Set a fixed white balance of 5500K for consistent colors for both photo and video.

**Video Shooting Tips:** Shooting video requires higher ISOs and



© JIM DECKER | BACKSCATTER | SONY a9 III

*Fluoro shooting requires higher ISOs and more open apertures than normally used when shooting traditional macro images. These settings help maximize the fluoro effect.*  
Sony a9 III | Sony 90mm Lens | 1/1,000 | ISO 3,200 | f8

attention to shutter speed. Shooting at ISOs above 10,000 is not uncommon, as video lights are much less powerful than strobes. To let in more light, set frame rate to 30p and use a 360 degree shutter (shutter speed of 1/30).

Lighting Tips: Use the highest power levels on your flash and video light since excitation filters reduce light output from your flash and video light. Position your lighting close to your subject to further boost the fluoro effect.

## Can You Shoot Fluoro During the Day?

Believe it or not, it is possible to shoot fluoro during the day. If the exposure settings listed above result in a black image without a flash, it is possible to capture fluoro photos. You will need to shoot in a darker environment, such as underneath a dock, in a swim-through, diving with limited visibility, or under a shadowed ledge.

Certain cameras make

this even easier, such as the Sony a9 III and some advanced compact cameras. These cameras use a global shutter, which has no flash sync speed limit, meaning you can use extremely fast shutter speeds to knock out all ambient light, even during the day.

Keep in mind this only works for photos, not video.

**The Backscatter Team**  
[www.backscatter.com](http://www.backscatter.com)



# Dive Into Lembeh

by Andy Deitsch

Situated on the mainland along the shores of Lembeh Strait in Indonesia, Dive Into Lembeh offers a haven for diving enthusiasts. Owned and managed by Miranda and Steve Coverdale, this boutique resort introduces guests to the captivating muck diving of North Sulawesi.

Miranda, hailing from Holland, and Steve, a Brit, have crafted Dive Into Lembeh with a focus on comfort and relaxation. Located in Kasawari Bay, the resort features nine sea-view private bungalows with modern amenities like TV, air conditioning, and a five-gallon water dispenser for hot and cold refreshment. Each bungalow also boasts a unique Japanese-style stone hot tub, perfect for unwinding (and warming up) after a day of diving. There is also a larger suite with similar amenities to the sea-view bungalows and for those who prefer an inexpensive option, a little further up the hill from the water are 3 longhouse rooms which are more simple yet still very comfortable.

Surrounded by lush greenery, the resort boasts a spacious restaurant and bar area. The expansive room features buffet-style dining along one wall, offering a variety of both

western and Indonesia style dishes. Adjacent to the bar, guests will find a cozy seating area furnished with comfortable couches, perfect for casual conversations about the day's dives or perusing critter identification books from the day's underwater adventures.

Renowned for its muck diving, Lembeh Strait is Dive Into Lembeh's main attraction. With its own house reef showcasing dive sites like Hairball and Aw Shucks, the resort provides unparalleled access to Lembeh's underwater wonders.

Guests can enjoy up to three daily dives aboard twin-engine fiberglass boats, exploring over 60 dive spots in the strait. For those who want more, the resort also offers a dusk mandarin dive and night dives along with unlimited shore diving. Whether observing elusive frogfish or photographing mimic octopus, each dive promises an encounter with Lembeh's diverse marine life.

The resort's dive center, equipped with Lembeh's largest camera room, caters to photographers of all levels. The room has plenty of outlets and power strips for all of your charging needs. Just in front of the



camera room are two large camera rinse tanks as well as a drying station with air hoses. In this same area near the rinse tanks is a large board showing the days diving schedule. Your name will appear on the boat that you are assigned to along with the dive sites that are planned for your boat.

Experienced dive guides accompany guests at a ratio of one guide for every two guests. The guides are experts on finding subjects and take pleasure not only in finding unique subjects but ensuring you have captured the photo you want to



get.

A typical day's diving starts at 6:30am with a light breakfast of coffee/tea, toast and cereal options. At 7am, it's time to get your tanks

analyzed for the day (for those diving Nitrox). Everyone boards their respective boats at 7:30am ready to head out for the first dive. Guests usually are back at the resort by 9am where a big breakfast is served. Besides the usually buffet selection of bacon, sausage and local porridge, there is also an egg station where you can order eggs any style.

Relax a bit or fiddle with your camera after breakfast and then prepare for the second dive which begins at 10:45am. Following the second dive, lunch is served. If you are late for lunch (say, getting carried away working on photos in your room), staff will come by and gently remind you that lunch is ready.

After lunch you have a bit more time to relax before the third dive of the day at 2:30pm.

If you have signed up for the mandarin dive, you have a bit of time but not too much since it leaves at 4:30pm. Night dives typically leave around 5:30pm. Following your last dive, your guide will take care of rinsing your dive gear and hang it back up in the dive locker ready for your next day of diving.

Dinner is a chance to relax and chat with others about the days diving. After dinner, you'll find several guests wander over to the bar area where the bar tender not only chats with guests but also is a very good

singer and ukulele player.

While diving in Lembeh is possible year-round, understanding North Sulawesi's climate can enhance your dive adventure. The region experiences two distinct seasons: the rainy season from November to March and the dry season from April to October.

During the rainy season, nutrient-rich waters nourish Lembeh's marine life, making it an ideal time for critter enthusiasts to encounter rare species. Conversely, the dry season offers clear skies and calm seas, providing optimal visibility for exploring Lembeh's dive sites.

Accessing Lembeh is convenient, with direct flights to Manado from Singapore via Scoot Airways or from Jakarta via Garuda Airways. Upon arrival, guests are greeted by resort staff who escort them to the resort along the newly built toll road, roughly an hour away.

Dive Into Lembeh offers a blend of luxury accommodation and world-class diving experiences. Whether you're an experienced photographer or a beginner, Lembeh welcomes you to explore its underwater wonders year-round. So, pack your gear, embrace the adventure, and immerse yourself in the underwater paradise of Dive Into Lembeh.



*Percula clownfish captured using slow shutter to get some motion in the anemone tentacles and burn in the blue background.*

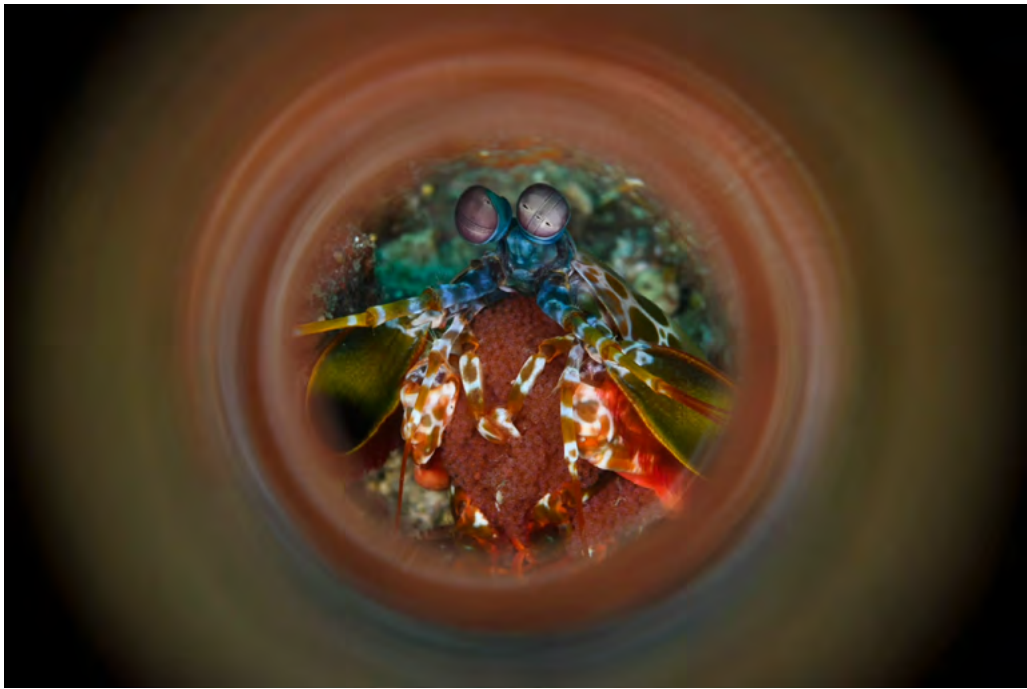
## Capturing the Magic of Lembeh

This was my sixth trip overall and third year in a row. For the past couple of years, I've attended a photography workshop with my newsletter partner-in-crime, Byron Conroy. As readers of our newsletter know, I'm a big advocate for underwater photography workshops as a way to improve skills, get inspired to learn new techniques, and walk away with some incredible images. This year was no exception, and I spent time on dives honing techniques I had barely used before.

Lembeh Strait, renowned for its muck diving, is a highly productive location for underwater photographers. Each dive presents an opportunity to capture truly stunning images, thanks to the diverse and often bizarre marine life that thrives in the area's black sand slopes and rubble-strewn seabed.

The workshop took place at Dive Into Lembeh, a resort run by the wonderful Miranda and Steve Coverdale.

The workshop itself spanned nine nights, with eight days of diving. Some participants opted to extend



*A peacock mantis shrimp with eggs captured using a light tube.*

their stay for a few extra days to maximize their time in this unique environment.

We had an excellent dive-to-guide ratio of 2:1, ensuring that each pair of divers received plenty of personalized attention. The guides are incredibly skilled at spotting marine life, making each dive highly rewarding. Additionally, we had a maximum number of six guests per boat, providing plenty of space to maneuver and reducing the overall number of divers at a site, which greatly enhanced the experience.

Byron runs his workshops similarly to others but with a

distinctive twist—he takes a highly structured approach. Rather than covering techniques randomly, he builds progressively, ensuring that by the end of the workshop, attendees are combining multiple skills seamlessly.

Each evening, Byron delivers a lecture and conducts an image review, during which participants submit three images for group discussion. The next day's dives are designed to reinforce the previous night's lessons, allowing attendees to apply newly learned techniques in a practical setting.

Between dives, Byron is always



*A thorny seahorse captured using a snoot to isolate the seahorse and then a blue continuous light to separately light the background.*

available to answer questions and encourage photographers to experiment with different approaches.

One of his key teaching points is that, in Lembeh, backgrounds are often unappealing due to the nature of muck diving. The challenge is to isolate the subject from the background effectively. There are multiple ways to achieve this, each offering a distinct visual style with its own advantages depending on the subject and conditions.

Byron begins with the fundamentals, such as shooting subjects against a black background,

introducing techniques like inward lighting, beam restrictors, snoots, and precise aperture and shutter settings. He demonstrates each technique using his own camera setup, giving attendees a hands-on understanding of how to manipulate lighting and composition.

As the workshop progresses, he introduces more advanced skills, including shallow depth of field, backlighting, colored and artificial backgrounds, natural background integration, creative lens use, slow shutter techniques, and, ultimately, motion blur with a snoot. The



*Porcelain crab on a piece of soft coral.*

final two nights include sessions on advanced post-processing in Lightroom and Photoshop. Yours truly helped with one of those sessions.

The group of attendees ranged from highly experienced underwater photographers to relative newcomers, some of whom had never attempted macro photography before. Regardless of their starting point, the results at the end of the workshop were truly impressive, with every participant making significant strides in their photography.

The 2026 workshop is already sold out, but due to overwhelming demand, an additional week has been

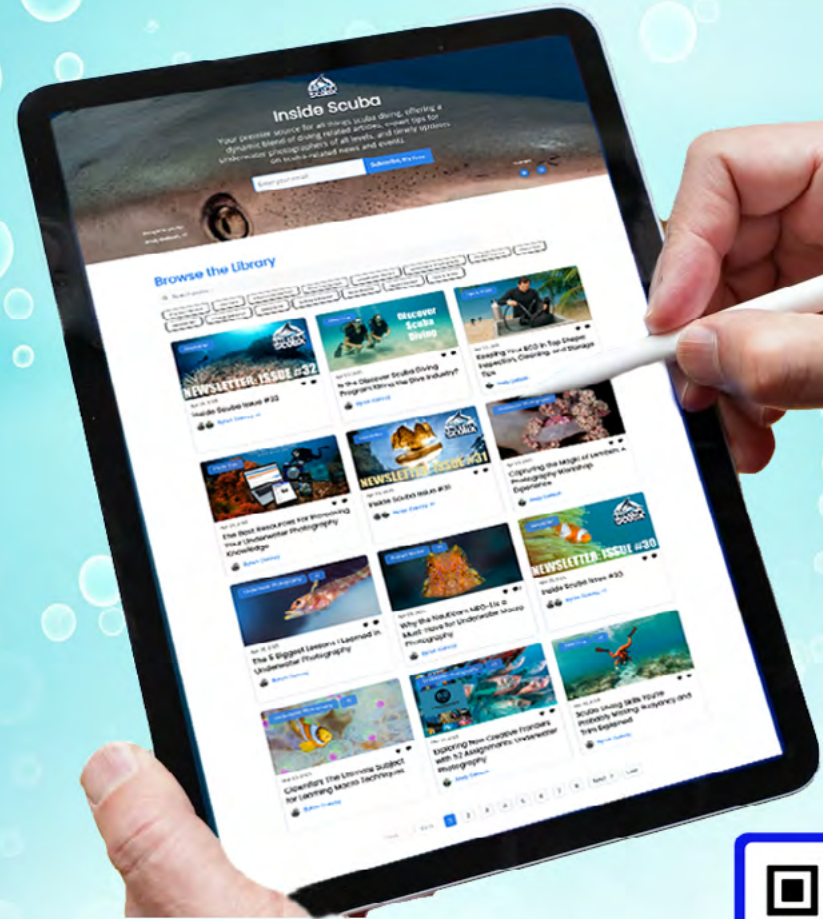
added, beginning April 18th for nine nights. The workshop will also be held in 2027, running for nine nights starting April 26th, with an optional 12-night extension. If you're interested in attending, contact Miranda at

[info@diveintolembah.com](mailto:info@diveintolembah.com)

**Andy Deitsch**  
[www.insidescuba.online](http://www.insidescuba.online)



Your Premier Destination  
for Scuba Diving News,  
Tips, and Underwater  
Photography Expertise.



Subscribe for free!  
<https://insidescuba.online/subscribe>



# Nudibranch Safari

By Lars Stenholt Kirkegaard

Every year a Nudibranch Safari is held at the popular diving site Gulen in Norway.

The event is known to everyone with an interest in nudibranchs, but also by many underwater photographers, because even though Gulen is a cold-water diving destination, it is also a hot spot when it comes to underwater photography.

In addition to being an ordinary diving resort, due to its good logistics, it has been used over the years for workshops, TV recordings, training and other events by underwater photographers from all over the world. I started doing workshops here myself almost 15 years ago, where I had Alex Mustard as a co-teacher.

Gulen is a really nice diving site, which has some of Norway's best wreck dives in the immediate area, and at the same time it has a very easily accessible and usable house reef right in front of the center, which is known to house an extraordinary number of nudibranchs.

Because the house reef offers exciting diving from a few meters deep to a good 40 meters without having to move much and because the fjord is

over 100 meters deep just around the corner, the variety of wildlife is high.

## Nudi for nerds

The nudibranch event at Gulen has existed since 2008 and was started by the well-known macro photographer Christian Skauge because there was a dive trip with bad weather, where you couldn't sail out to the wrecks. It quickly became a success and after a few years they invited 2 associate professors from the Norwegian University of Science and Technology, Torkild Bakken

*Over the years people from countless countries have joined the safari. This year more than 10 nations were represented.*

*Photo: Jochen Frenzer / explore-the-ocean.com*

*Nudibranch photographed with TG-7 camera and ring light. The contrast is then increased. Note the very even lighting from the ring light which gives lots of color and detail.*

*Photo: Lars Kirkegaard  
Specs: ISO 200, f:3,5, 1/250 sec*





*The field lab had a range of microscopes and a photo setup for deep studies.*

and Jussi Evertsen. Both worked with nudibranch taxonomy and distribution for Norwegian waters since 1997, which brought the event to a completely different professional level.

The week is usually built around scientific collection, documentation and education about nudibranchs, giving participants the opportunity to learn where the animals are found, what they eat, the variation in the species and how to handle them when they are subsequently studied under a microscope.

Every day there are lectures by some really talented guest lecturers on topics related to the biology of nudibranchs and between dives there is study in the field lab, where everything is recorded and documented.

Gulen is the place in Norway where the most different nudibranchs have been spotted and over the years 3 completely new species have also been found, all of which have been officially registered and named: *Gulenia orjani*, *Gulenia monicae* and *Fjordia chriskaugei*.



*Collecting nudibranchs for further study. By picking them in a bottle using a vacuum, they will be unharmed. During study they will be in water at all times. After study, most will be released and some put in alcohol for further study at the university.*

The couple had been aware of this for a long time and had decided to do something about it. They therefore contacted me and asked me to handle that part.

### **Not nudi-nerd**

I have to be honest, I have had a very strained relationship with nudibranchs. Whether it is because in my younger days I was a wreck enthusiast and tech diver and therefore did not have an eye for these small biological wonders, I cannot quite agree with myself.

I have always seen a lot of pictures of beautiful nudibranchs and that is precisely what I mean, beautiful nudibranchs. Because nudibranchs are incredibly beautiful in their nature, I have seen far too many bad pictures of beautiful nudibranchs, and since I have a hard time keeping my mouth shut when I see sloppy photography, it has resulted in many heated discussions. But that was back then. Now I love photographing nudibranchs. Maybe because I have

### **Photo and nudibranch?**

This year, Ørjan Sandnes and Monica Bakkeli, who are the owners of the center, had the idea to shake things up and make the event a little different.

Since the event and the participants all spend a lot of time photographing the nudies, there is always a good amount of talk about photography, but because the event has always been of a scientific nature and not a photography course, the photography part has been left alone.



*Nudibranch photography is usually done with macro lenses. However, in this case a wide angle is used to allow for background effect. Photo: Andreas*

been to so many nudibranch events that I have now learned to find them, which is an important part of getting a good picture.

Admittedly, I still don't have much interest in the biology, but as a photographic object they are top.

### **Nudibranchs as a motif**

I have a background as an advertising photographer, and for part of my apprenticeship I was at a studio that had a portrait department. It was during that time that we made black and white copies in the darkroom in

the basement and then pressed them and edited them with a razor blade before we framed them.

During that period I learned a lot about the composition of a face. For example, it means a lot to a good portrait image whether the eye is sharp, the corner of the mouth is relaxed in a smile, whether the lips are dry or shiny, whether the angle of the neck and head matches the turn of the face, as well as the focal length, shadows, exposure, backlight and background. Yes, photographing portraits is incredibly similar to doing macro photography underwater.



*Not all pictures are of nudibranchs. Sometimes their eggs are also quite OK. Here I am testing the small Smart Torch snoot combined with a slight softening from the ring lamp. And no, the starfish is not positioned but wandered into the picture so it was a combination of luck and patience.*

*Photo: Lars Kirkegaard. Specs: ISO 400, 1/250 sek, f:4,9, 18mm*

### **Phototechnical or scientific feedback**

I had bought into Ørjan and Monica's idea that it was possible for me to direct the evening's photo review of the day's finds. I can usually do that as routine, because that's exactly what I do when I hold photo events and workshops. Whether it would work at an event whose primary function was to study nudibranchs, I had no idea.

Everything I know about photography falls to the ground if a photo has lost its scientific or documentary value. Was it a challenge that could be solved, so that the participants felt that my feedback was relevant or would I just be in the way?

### **The daily news**

Each day, one or more photos were collected from the participants which I then reviewed in the evening.

There was a lot of natural talk about nudibranchs and their findings, but the new element was that we also looked at the photographic technical aspect of the images.

It basically worked well and it was clear that all the participants were equally interested in talking about the photographic technical aspect as the biological aspect. Since my biological knowledge of nudibranchs is not great and since many of the participants had a biology background or were just big nudibranch enthusiasts, there was quite a lot of feedback from the participants every evening.

Often there was scientific input on a picture that changed both my and the photographer's view on the choice of a photo angle or lighting. And sometimes there was a discussion about the technical value of the picture versus its scientific value, but it all happened on a both cheerful and scientifically high level.

## Who is right?

One evening there was a picture that really divided the waters. There were people who thought it was one of the best pictures taken of a nudibranch all week, and others couldn't see the interesting thing in it. This is not an unfamiliar situation for me, because images depend on

the eyes that see, and we all put a combination of our diving, life and photography experience into the evaluation of an image.

My role was largely to illuminate the different ways in which one can see an image, as well as try to understand the photographer's thoughts when he/she pressed the button. When I understand this myself, I have to try to convey it to the other participants, which can be both a difficult but also a very fun process.

I always start a photo session by reminding the participants that if the photographer can find joy in a given image, then it has a justification regardless of what the majority of the participants may otherwise think. And that is a good rule of thumb to follow.

## Big vs. small?

Another fun discussion arose from a question from a young participant, who exclusively photographed with an Olympus TG-7 compact camera without a tray, but with a small video light in her hand. Her question was for all of us "established underwater photographers". She asked: "Why do you choose to swim around and photograph with such a large camera equipment as you have, when the subject is so small... and why do you choose to limit your lighting to lights



*The most popular camera in the world – and in Gulen – is the Olympus TG-6/7. Here in a Weefine housing with ring light and Smart Torch snoot.*

that are attached to an arm system?"

I LOVED that question. And she was absolutely right in her assumption. It is sometimes incredibly stupid and impractical with the large equipment we have, because it goes without saying that small subjects

are easiest to photograph with a small camera setup, where it is easy to position yourself in relation to the composition and where it is easy to get a small lamp both close to the subject and placed at the right angle.

The fact that many people



*If you are patient with the little animals, you can capture them with your camera in incredible positions. And if you backlight them, you can almost make them glow. But it requires patience and a steady hand.*

*Photo: Stephane Raynal. Specs: TG-6, 1/100, ISO 100, f:18*

choose a large camera is mostly about the fact that you can use a camera with a large CMOS and thereby achieve a lot of detail in the final file, which in turn allows for a lot of post-processing options. And of course there is a big difference between photographing with two fast flashes or a small LED lamp - and she understood all of that very well.

However, she was still not entirely convinced that the result was

up to the equipment and I understand why. In reality, we all want the best possible quality and the best light, but in the smallest possible package. And it is often a combination that is full of compromises.

### **All that equipment**

Since I make a living selling UW photo equipment, I have many different underwater housings myself.



*If you look closely, you can find areas where the nudibranchs are very close together. So close that it is possible to get several in the same picture. Here they are photographed with a Magic Tube, which nicely frames the subject. It is not a complicated photo, but the effect is delicious.*

*Photo: Jochen Frenzer / explore-the-ocean.com Specs: 5D MKIII, 100mm, 1/125, f:8.0*

Fortunately, during the week of the safari, I also had the opportunity to play with them. I am always behind in testing new equipment from suppliers, so it is good to be away for several days.

Changing equipment during a photo trip is not really something I recommend, because good photos are very much about being comfortable with your equipment and having all the buttons and functions

completely under your skin. If you change equipment, you often get set back and have to rethink logistics and buoyancy.

I am typically in Norway 2-3 times a year to dive and test, and one of these times is typically at Gulen, so this year I was able to combine business and pleasure.

As always when I am out giving lectures or teaching, I had brought a lot of photo equipment with me



*The fine details in wildlife can be difficult to photograph. But with backlighting or, in this case, a snoot and a little softening, you can really bring out the structure. Here photographed with the TG-7.. Photo: Lars Stenholt Kirkegaard*

for the participants to try, and it was popular. Many of the lamps and optics I had with me changed hands many times during the week.

### Participant toys and testing

Most people know that creative macro photography is related to lighting, and many use a snoot to bring the subject into focus and exclude the background from the image. I love snoot photography and a nudibranch safari was the perfect place to play with snoots.

One of the most well-known snoots on the market is of course the Backscatters MF-2, which was developed for this purpose, but most flash manufacturers have made an optical or manual snoot unit for their flash. I myself use Marelux' SOFT which has a built-in focus light and a built-in iris, but on Gulen's house reef, I and the participants had plenty of time to play with one of my current favorite gadgets; Smart Torch from Weefine, which is an LED lamp with a small lens and a snoot. We put it together with an Olympus



*During the week, the nudibranchs were studied and documented in a special photo stand in the laboratory. A black background was used and the snails were photographed while lying in water. Here is a photo collage of everything that was photographed during the week.*

TG-7 camera and a small lamp. This allowed us to play with snooting, both with and without backlighting. The small compact cameras are very prone to overexposing, so sometimes it helps to soften the light a little and reduce the contrast in the image. Several of the participants made dives where they held the snoot lamp in their hands to be flexible.

Another light gadget that I brought was the new Ringlight from Weefine. The good thing about photographing nudibranchs with

a ring light is that you are typically very close to the subject. And this is precisely where ring lights have their strength. Unfortunately, they work just as badly when you are a little further away from the subject, because they give a lot of backscatter.

At Gulen we played around with the lamp for nudibranch photography a lot and it works well as a documentation light, which was the goal for many of the participants. Of course, you have to remember that you remove most shadows in the

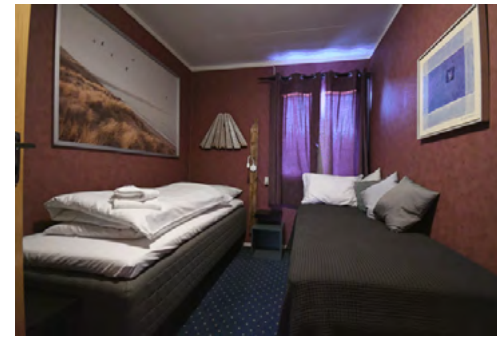


image and thus reduce the contrast in the subject.

If you want a little highlight or shadow in the image, you can advantageously combine the ring light with another lamp. It can either function as a side light or an effect backlight, there are many fun options.

The participants who used it found that it provided good and even light, which was very useful for identifying nudibranchs, but that it was necessary to give the images some contrast later in the editing.

### The process was successful

The week progressed and many

nudibranchs were documented. In fact, a record was set with no fewer than 61 different nudibranchs, which is a good thing since a total of 87 different species have been found on Gulen over the years. So there was great satisfaction among the research team with the effort.

On the photo front, things also went well, because there were a lot of good photos taken and nice photo talks. The participants seemed satisfied with the feedback they received in the evening. As they got used to us reviewing images, they also remembered to put them on the memory chip for me during the day and to be on time so that we could

start the presentation. The most important thing for me was that Ørjan and Monica were happy with their decision to invite me and asked if I would consider coming again next year.

The annual Nudibranch Safari takes place every year in March.

[www.gulendiveresort.com](http://www.gulendiveresort.com)

If you want to read more about workshops with Lars, you can do so at: [blog.fotografit.eu/workshops](http://blog.fotografit.eu/workshops)

**Lars Stenholt Kirkegaard**  
[www.fotografit.eu](http://www.fotografit.eu)





IPHONE HOUSING KITS

OLYMPUS Tough Camera  
Accessories

GOPRO

UNDERWATER HOUSINGS

TRAY AND ARM SYSTEMS

WET LENSES

DOME PORTS FOR HOUSING

DOME PORT ACCESSORIES

HOUSING ACCESSORIES

UNDERWATER VIDEO HOUSINGS

UNDERWATER MONITORS AND  
VIEWFINDERS

LED Dive Lights

SNOOT LIGHTS (SNOOTING)

FLASH STROBE SYSTEMS

BATTERY AND CHARGERS

CAMERA GEAR BAGS

BOOKS

COLOR FILTERS

RENTAL EQUIPMENT

OUTLET

SERVICE

Choose brand



IPHONE HOUSING KITS



OLYMPUS Tough Camera  
Accessories



GOPRO



UNDERWATER HOUSINGS



TRAY AND ARM SYSTEMS



WET LENSES



DOME PORTS FOR HOUSING



DOME PORT ACCESSORIES



HOUSING ACCESSORIES



UNDERWATER VIDEO  
HOUSINGS



UNDERWATER MONITORS AND  
VIEWFINDERS



LED Dive Lights

# In search of Basking Sharks

by Colin Munro

Basking sharks are the second largest fish on the planet. I'd been fascinated with them ever since reading Gavin Maxwell's Ring of Bright Water trilogy as a kid; although primarily a story about the pet otters he kept and rural life in a remote area of Northwest Scotland, the book also mentioned these giant fish that arrive each summer off Scotland's west coast, and his earlier adventures operating a harpooning ship to catch them.

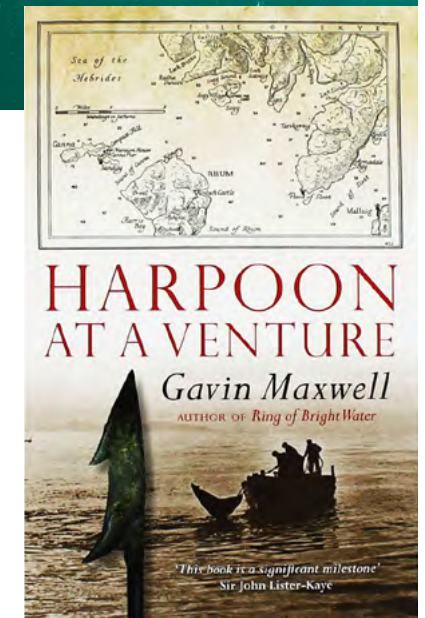
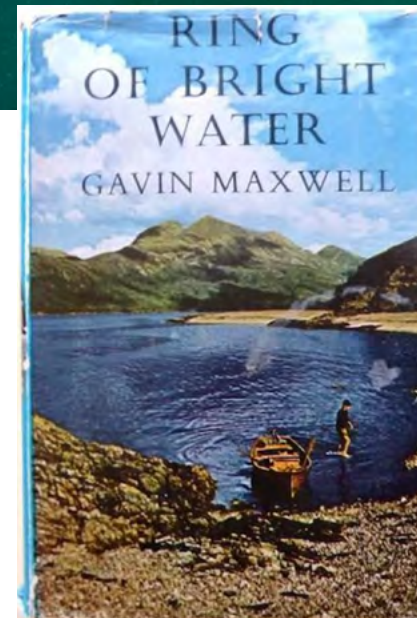
Later I read Harpoon at a Venture, the story of Maxwell's attempt to establish a basking shark fishery on the island of Soay shortly after the end of WW2. The operation was a financial disaster, but even in the bloody business of harpooning and butchering sharks, Maxwell's fine eye for detail and his innate love of nature shone through. Although autobiographical in style, Harpoon at a Venture probably contained more detail about the behaviour and appearance of basking sharks than any other piece of writing at that time.

Years rolled past. After brief periods in the military, as a salvage diver, a motorcycle courier and a nature reserve warden; in other words pretty directionless, I earned my degree in biology and, returning to the land of my birth, began working at a marine biological station on a small island of the



west coast of Scotland.

During the summer months I spent a lot of time at sea, from Arran up through the Sea of the Hebrides and northwards through The Minch. We would occasionally spot the big dark triangles that were the dorsal fins of basking sharks, and sometimes the tips of their snout and tail, as they



This article was first published on Colin's website:

[www.colinmunrophotography.com/blog/basking-shark-images-cornwall/](http://www.colinmunrophotography.com/blog/basking-shark-images-cornwall/)

cruised just beneath the surface, mouth agape, hoovering up plankton. Our work was primarily focused on scientific diving surveys, recording marine life. Despite hundreds of hours spent underwater I had not so much as a glimpse of a basking shark beneath the waves.

As it happened, the last of Gavin Maxwell's successors, the last hunter of basking sharks in the U.K., a larger than life character called Howard McCrindle, lived on the same small island as I. I did not personally know him, but I would regularly see his boat moored in the nearby port of Largs, distinctive with its high spotting seat mounted on a frame near the bow, and the harpoon itself immediately in front. Sometimes there would be a shark more than half the length of the boat, lying on deck waiting on delivery to Ayr fishmarket.

More time passed. I move to the southwest of England, now working as a freelance marine biologist and environmental consultant. Much of my work was focussed on diving surveys at that time, but still, I had yet to see a basking shark underwater.

The two best places in the World to see basking sharks are probably the west coast of Scotland and off Southwest England, especially West Cornwall, yet despite living and working in both regions for several years I had yet to see one underwater.



So around 2006 I decided I was going to make it happen.

I contacted a Cornish boat skipper operating out of Falmouth and arranged to join a group of technical divers who were diving wrecks off Falmouth. Late afternoon the end of their two dives, Gary (the boat skipper) would pick me up from Mylor Marina, a little north of Falmouth harbour, and we would spend an hour cruising the coastline hunting for sharks. As chance would have it, shortly after I boarded Gary's boat, he received information from other skippers that a pair of basking sharks had been spotted just off



Pendennis Point, near the entrance to the Fal Estuary, a little over three miles distance away.

Once there, we spotted the sharks almost immediately. They were both large adults, maybe seven or eight metres long. They were feeding in a large cloud of greenish, plankton-rich water, slowly moving in large, lazy circles as they filtered and swallowed vast numbers of tiny copepods. I checked my camera one last time, slipped my mask, fins and snorkel on, and waited.

Once we were reasonably close Gary slowed the boat, and on his signal I slipped over the side. Once

in the water the current immediately hit me. Swimming as hard as I could, glancing up and back occasionally to check which way the divers on the boat were pointing (down at sea level I could only see a few metres on front of me through the cloudy water) to make sure I was still swimming towards the sharks.

From a distance basking sharks appear to be moving slowly, their tails swing from side to side in a very lazy fashion. But this is deceptive, rather like watching a train in the distance. Up close these giants are moving like express locomotives. A snorkeller wearing fins has no hope of keeping



*The bristles of gill rakers allow seawater to pass through, but trap zooplankton*

pace with them. They move as if completely unaffected by the current that I was having to fight hard against.

My plan was to get in front of them and wait for them to pass me.

Directed by shouts and waving arms from the dive boat, I positioned myself around 20 metres in front of the leading shark, and hung in the water watching and waiting.

The first shark began to appear out of the green haze. Basking sharks swim, feeding, with their mouths agape. Water is rammed into their mouths by the forward motion. This water then passes out through their

gill slits, passing over gill lamellae where oxygen is absorbed and waste carbon dioxide released, the gills functioning in a manner analogous to our lungs. But basking shark gills have an additional feature; gill rakers.

The bristles of gill rakers allow seawater to pass through, but trap zooplankton. Once sufficient planktonic animals have accumulated on the inside of the rakers the shark will close its mouth, swallow, and the process will repeat. The wide-open mouth of a large basking shark will measure around two metres, from the tip of its snout to its lower jaw. I knew



*Fellow marine biologist, Kat Brown, acted as boat driver for me when we launched out of Plymouth*

well that basking sharks are not at all aggressive, but still, the sight a seven metre long fish bearing down on me at speed, with its mouth wide open was a little disconcerting.

I was mostly concerned that the shark would collide with me accidentally. Being bumped by a nearly four tonne shark was probably going to hurt. I need not have worried; about a metre away from me the shark turned slightly and cruised past me.

For the next 20 minutes or so I simply hung in the water while the two sharks swam past, then circled round

again to pass close by. My 36 exposure roll of film was exhausted (this was still a time when I shot exclusively on film underwater, on a Nikonos camera system) so I signalled to the boat and slowly began to swim towards it.

My first encounter with basking sharks underwater had been so easy, I had no idea how lucky I was. It would be three years before I was able to repeat the experience. The intervening summers, with many days spent on charter boats or out on my own Zodiac inflatable proved that basking sharks can be shy, skittish, or - more often than not - simply not visible at the surface. In June 2009, a few weeks after my 51st birthday, I got lucky again.

Getting my friend, and fellow marine biologist, Kat Brown, to act as boat driver for me, we launched out of Plymouth, South Devon, and headed around to the Great Mewstone, a rocky island just outside the mouth of Plymouth Sound. Currents run hard around the Mewstone, and basking sharks are occasionally spotted there.

We were in luck, spotting one within an hour or so of slow cruising around; I got ready to get in the water with it. I had recently purchased a Fuji Finepix S2 pro (essentially a Nikon D80 with a Fuji sensor) and Subal housing. As the S2 pro took Nikon full frame lenses (of which I had many) this system worked well for me.

*Getting ready to enter the water with the Gates Z1 housing (with standard wide angle port, not Fathom, on this occasion). Photo credit: Kat Brown.*



As we approached we saw there were two sharks, similar to the previous encounter. This pair were moving in a big figure of eight path, with each pass slowly tracking further east. I adopted the same technique, being dropped ahead of the sharks and swimming towards and ahead of them at approximately 90 degrees to their path. Breathing hard, my heart pounding, I swam as fast as my legs would propel me, but the shark was faster. My camera pushed in front of me I clicked off frames as the shark passed ahead of me.

Despite swimming at full speed the shark easily outpaced me, swimming past as I approached. For scale this is an uncropped image, taken with an ultra-wide lens Tokina 7-14mm lens at 9mm (13mm, full frame equivalent). Numerous parasitic sea lamprey (*Petromyzon marinus*) can be seen attached between the sharks pelvic fins.

Despite swimming at full speed the shark easily outpaced me, swimming past as I approached. For scale this is an uncropped image, taken with an ultra-wide lens Tokina 7-14mm lens at 9mm (13mm, full frame equivalent).

On the second pass the basking shark came almost straight towards me. I could clearly see the gill slits and gill rakers inside its mouth as it came close. Once again, when it seemed as if the shark was certain to smack right into me, it altered direction slightly and cruised past me..

On a high, I was keen to get back in the water with the baskers as soon as possible. I had just acquired a Sony HDV-Z1u video camera (recording a then pretty stunning 1080i) along with a Gates housing and Fathom SWP44 120 degree wide angle port. It was the perfect system for getting great footage of them. So nine days later Kat and I hitched my old Zodiac



Mark III behind my even older Series 3 Land Rover, and headed 100 miles West to St Ives in North Cornwall. There we launched the Zodiac at the slipway and headed west. Eight miles west of St Ives, Pendeen Lighthouse marks Pendeen headland and the narrow channel between it and Wra Rocks (aka The Three Stone Oar) some 200 metres offshore. This was to be our turnaround point, before we lost the protection of the coastline and were exposed to the prevailing southwesterlies, and the strong currents off Land's End. As we approached the sea had already picked up a slight chop. That was when we when we saw it, the unmistakable black triangle of a basker's dorsal fin. Time to get in the water.

The Gate's Housing is solidly engineered, to put it mildly. Complete with Fathom Lens and external monitor it weighed in at around 30 kilograms. A significant workout for biceps and shoulder muscles.

After last minute checks I slipped into the water. Once underwater the video camera and housing was near neutral buoyancy, but that was due to the large volume of water it displaced. With the hydrodynamic sleekness of a shipping container a not insignificant amount of thrust was required to move it through the water at any speed.

We had judged it too fine. As I hit the water the shark was already in sight, heading past at speed and disappearing into the distance. But almost immediately it turned again



and headed back, almost straight towards me. Finning as fast as I could I started swimming to place myself in front of the shark, but once again its speed was deceptive and it cruised past a metre or two in front of me, close enough for me to count the number of parasitic lampreys clamped to its underside. Again and again the shark cruised past, wheeled and headed back in my direct, apparently oblivious to my presence. Once it was too far in front Kat would pick me up, then drop me in front

of it again. After the third drop, we swapped over to give Kat a chance in the water, then we decided it was time to head for home.

## Colin Munro

*Colin Munro's Substack is a reader-supported publication. To receive new posts and support my work, consider becoming a free or paid subscriber.*

[www.colinmunrophotography.com](http://www.colinmunrophotography.com)



## Don't settle for 2nd best



Film - No Filter,  
No White Balance



Digital - No Filter,  
Manual White Balance



Digital - Magic Filter, Manual  
White Balance

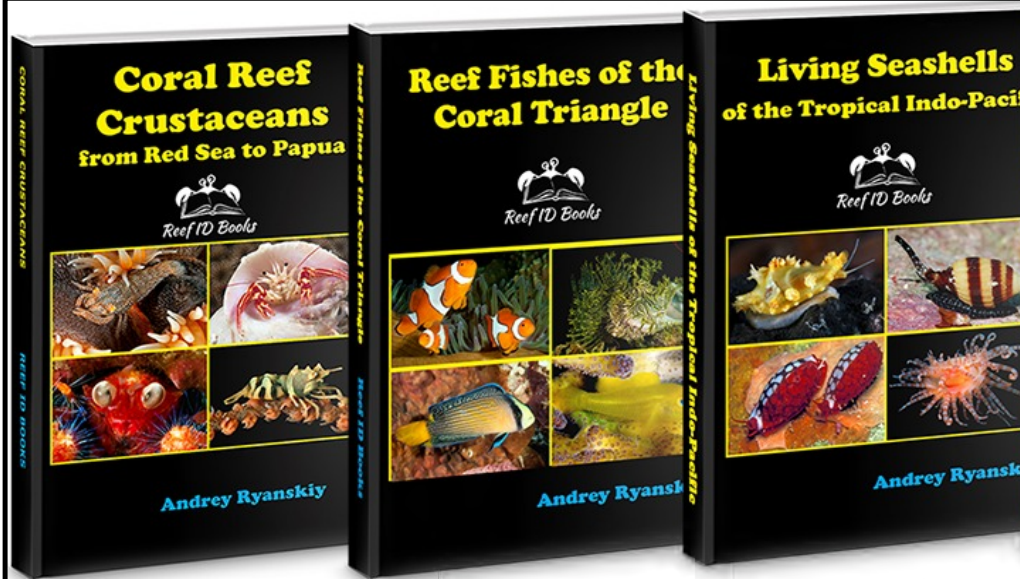
Digital cameras have opened up new possibilities to underwater photographers. For available light photography manual white balance is an invaluable tool for restoring colours. But when you use it without a filter you are not making the most of the technique. You're doing all the hard work without reaping 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](http://www.magic-filters.com)

**Reef ID Travel Set with 6240+ species on fishes, nudibranchs, seashells, starfishes, flatworms, crustaceans. Up-to date taxonomy. Paperback, iBook, pdf.**



<https://reefidbooks.gumroad.com/>



# Marshall's Mysteries 21

**A**

© Colin Marshall / biosphoto



Lembah, Sulawesi, Indonesia

Image about 5 cm across

**Do you know what these animals are, or what they are doing? Have a guess – answers on page 66**

**C**

© Colin Marshall / nature in stock



Halmahera, Indonesia

Image about 10 cm high

**B**

© Colin Marshall / Alamy



Seraya, Bali, Indonesia

Animal about 10 cm across

**D**

© Colin Marshall / Alamy



Komodo, Indonesia

Animal about 2 cm across

## Kit for sale

If you're looking for a specific piece of kit, enter a keyword (e.g. flash, housing, Ikelite, etc.) to show only the adverts you want.

Search UWP adverts



### FOR SALE – SET of Sea & Sea YS 250 PRO

SET of Sea & Sea YS 250 PRO, incl.diffusers and TCL ball mounts, 2x batteries, 2x chargers (EU and UK). 5-pin Dual Sync cord-1pc, 5-pin Sync Cord N-2pc, 2sets - Double Ball Arm L and M, YS-TTL Converter, spare ... [More >](#)



### FOR SALE – Sea Frogs Panasonic GH5 housing, flat and dome port

Brand new and never taken underwater, 40 metre Sea Frogs (formerly Meikon) housing for the Panasonic GH5. Flat port for macro lenses and dome port for wide angle. No zoom or manual focus controls. Prefer sale in the UK and ... [More >](#)



### FOR SALE – Aquatica Macro Port & 2 x Sea & Sea YS -120 Duo Strobes

Aquatica Macro Port (Manual & Autofocus) for any DSLR Aquatica housing with the 4 lugs bayonet fitting. £180. Sea & Sea YS -120 Duo Strobes with instructions & one Diffuser they are in good used condition and in full working ... [More >](#)



### FOR SALE – Nauticam Na-d800 Housing for Nikon D800

Nauticam Na-d800 Housing for Nikon D800 Excellent condition. Full overall by Nauticam in December 2017, not in the water since. Vacuum check; electronic monitoring circuit installed, no vacuum system. 2000 euros + shipping ... [More >](#)



### FOR SALE – Nauticam flat ports and lenses Sony 28mm and 90mm

Nauticam flat port for Sony 28mm + sony lens 28mm +Nauticam flat port for Sony 90mm + sony lens 90mm+Nauticam trigger flash for sony. SOLD Can be sold separately. Total price 1260€ (does not include insurance and shipping) ... [More >](#)



### FOR SALE – SEA & SEA MM2 U/W CAMERA WITH ACCESSORIES

SEA & SEA MM2 U/W CAMERA WITH ACCESSORIES: - Yellow SUB 50 TTL strobe / arm extension - SEA & SEA 16mm Wide angle lens MM-2 - SEA & SEA Macro lens ML-2/3T plus attachments - Removable view finder - ... [More >](#)



### FOR SALE – Nikon D500 + Hugaftot D500 setup

This one year old set of equipment is in excellent working condition and will serve great to a new owner. The reason for sale is a switch to a new equipment. Nikon D500 (19k clicks). Sigma 10mm F2.8 Fish Eye. 128Gb XQD Lexar ... [More >](#)

Please support our advertisers and help keep UWP free.



## Small Ads

**Sell your stuff** You'll be amazed at just how quickly your unwanted underwater photography kit could be converted into hard cash with a UWP small ad. You can have your own UWP small ad from just £7.50 and it can have one photo as well as up to 100 words.

Check out small ads here

Buy your small ad here

## Marshall's Mysteries 21 - Answers

A



This is a Swimming Anemone, (Bolocerooides mcmurrichi).

Some Sea Slugs like feeding on Swimming Anemones, both for food and to absorb the stinging cells to use for their own defences against their predators.

The Swimming Anemone has taken defence to a new level. In addition to deploying its stinging cells when under attack, it can rapidly swim away (eg from its usual position on the sand, as in the image below) to avoid the predator (Sea Slugs are fairly slow-moving).

It can deliberately detach a tentacle to distract and confuse predators. This dropped tentacle, if not eaten, can regenerate into a new Swimming Anemone.

The Anemone also has symbiotic single-celled algae (Zooxanthellae). Symbiotic because the algae produce food from sunlight (via photosynthesis), sharing the spoils with the Anemone, who in return gives the algae shelter.

Swimming somewhere new not only extracts the Anemone out of the clutches of a Slug, but also allows the Anemone to move to better feeding grounds – for itself and perhaps for its algae symbionts.



Seraya, Bali, Indonesia

© Colin Marshall / Ardea

B



Cone Snail (Conus sp) with captured Cardinalfish (Apogonidae Family) prey, seen on the left with a rather startled expression...

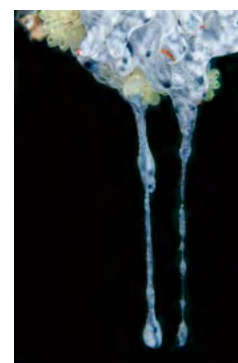
Cone Snails are carnivores and eat worms, other snails and some even hunt fish as shown here.

The Snail famously shoots a venom-coated, barbed, "harpoon" (actually a radula tooth) from their "hypodermic" proboscis into their prey. The Snail then retracts the harpoon and digests the prey. The potent venom, potentially fatal even for humans, immobilizes the prey nearly immediately.

Note the presence of a small voyeur red-eyed Amphipod watching this slow motion slaughter.

© Colin Marshall / Alamy

C



This rather "drippy" lifeform may look like a forming stalactite, but it is actually colonial (collection of zooids) Didemnid Ascidians (Sea Squirts), from the Didemnidae Family.

A different shape variation is shown below.



Pemuteran, Bali, Indonesia

D



This is possibly the most esoteric and complicated animal(s) seen in nearly 4 years of "Marshall's Mysteries"!

It is a symbiosis between a Sponge (Mycale fistulifera) polyp (red thing) and a Crown Jellyfish (Nausithoe punctata) larva (white things on sponge).

Crown Jellyfish are carnivorous suspension feeders, eating zooplankton in the water column. Their larva embed onto different Sponge species, which provide them with the hard substrate required for their polyp phase.

Sponges are also suspension feeders, but proactive; they create internal micro-currents such that the nutrient-rich inhalant seawater current passes inside the Sponge and nutrient-depleted currents are expelled out. The Jellyfish larvae attach themselves on the *inhalant* pores of Sponge, to enjoy the highest concentration of nutrients.

The Jellyfish gains food and habitat from the Sponge, who in return is rewarded with chemical warfare weapons to use against predators - stinging cnidocytes develop very early in Jellyfish.

For a free compilation pdf of all "Marshall's Mysteries" published to date, contact me at [colintrmarshall@yahoo.com](mailto:colintrmarshall@yahoo.com).

# Guidelines for contributors

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

In 2011, my goddaughter, Margaux Nelson, and I kayaked out to the wreck of the Carthaginian II—a beloved Lahaina landmark intentionally sunk by the Atlantis Submarine Company in December 2005 to serve as an artificial reef off the coast of Maui, Hawaii.

As is customary during submarine dives, a surface support vessel was present. On this particular day, it happened to be crewed by a friend of mine, who generously offered us the use of the company mooring for our kayaks. He also coordinated with the submarine's captain to ensure we could be underwater at the perfect moment to photograph the sub passing by the wreck.

Margaux, daughter of renowned marine artist Robert Lyn Nelson ([robertlynnelson.com](http://robertlynnelson.com)), is a frequent dive model of mine. You can hear the sub's electric motors humming through the water well before it comes into view. As it approached, she swam the length of the wreck, adding a human element to the striking scene as the submarine circled us, a dramatic contrast of diver and machine in the depths of the Pacific.

Through the wide dome viewing ports, passengers pressed their faces

against the glass, wide-eyed and waving with delight. Conditions were ideal—mild currents and excellent visibility. However, I've experienced strong currents here on previous dives, which brings in rich planktonic morsels that attract the abundance of marine life found around the wreck. The ship's central hold often hosts several resting whitetip reef sharks (*Triaenodon obesus*). The sound of our bubbles sends them out of the wreck to circle the ship awaiting our inevitable ascent.

Each year, an estimated 10,000 to 12,000 humpback whales (*Megaptera novaeangliae*) migrate to the Hawaiian Islands during the winter months, typically from December through April. These whales travel from feeding grounds in Alaska to the warm, sheltered waters of Hawaii, where they breed, give birth, and nurse their calves.

During this time you will hear their haunting songs echo through the water. On occasion, divers have even encountered the whales passing by the wreck—an unforgettable moment for any dive log. Hawaii is one of the most important breeding grounds for the North Pacific population of humpbacks, and the waters around



*Canon 5D Mark II housed in an Ikelite system, paired with a Sigma 15mm full-frame fisheye lens. Settings were 1/100 sec at f/8, ISO 320, with two Ikelite DS161 strobes firing on TTL for even, natural lighting.*

Maui—particularly the 'Au'au Channel between Maui, Lāna'i, and Moloka'i—are considered some of the best places in the world to observe them.

The Carthaginian II remains one of the few historic sites to survive the devastating Lahaina wildfire of 2023.

Tragically, the Atlantis submarine was lost, and Lahaina Harbor has yet to reopen to the public.

**David Fleetham**  
[www.davidfleetham.com](http://www.davidfleetham.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](mailto: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

When I first started to see blackwater images of crustaceans riding jellyfish I put these shots high on my bucket list. When I finally came across this combination I shook my head so hard that my mask nearly flooded.

The shrimp is not just riding the medusa, it is driving the pair in nonstop circles that would make any mere mortal toss their cookies.

After twenty shots or so I decided I had better check to see what I had shot to make sure I was getting something. Ikelite's TTL had nailed the exposure, but seconds later when I went to resume pulling the trigger the tiny pair had disappeared into the blackness. Such is the frustration and elation of blackwater diving.

I have encountered more of these swirling partnerships on subsequent blackwater dives and each time I learn a little more of how to shoot this situation. You would think that after nearly five decades of photographing creatures underwater I would have this down, but it turns out that the learning curve is never ending.

Downline provided by the Manta Ray Bay Resort and Yap Divers who regularly take divers out into the darkness. Jennifer and I will be back in Yap for MantaFest 2025. August 23 through September 7, 2025.

**David Fleetham**  
[www.davidfleetham.com](http://www.davidfleetham.com)



*Shot with a Canon EOS R5 mirrorless in an Ikelite dry-lock housing with a Canon RF 100mm macro lens, 1/125 sec, F16, ISO 320, with two very powerful Ikelite 230 strobes set on TTL.*

**Do you have a shot which has a story within a story?**  
**If so e mail it with up to 750 words of text and yours could be the next Parting Shot.**  
*Images can be any size bigger than 20cm (horizontal or vertical) @ 150dpi saved as jpeg format and about 500 - 750 words would be fine.)*

[peter@uwpmag.com](mailto:peter@uwpmag.com)