

Alex Mustard

If **Alex Mustard** isn't in the sea today, it's because he is probably flying to his next diving destination. The 2013 European Wildlife Photographer of the Year tells *Wild Planet* how he became addicted to the underwater world and why he is always charming at the airport check-in desk...

Interview by Keith Wilson

A lemon shark (*Negaprion brevirostris*)
at the surface of the sea, Little Bahama
Bank, The Bahamas

Nikon D2X, Tokina 10-17mm f/3.5-4.5
at 10mm, ISO 100, 1/250sec at f/11

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What triggered your interest in the underwater world?

Fish and other marine life were always my passion growing up. My mum has photos of me as a toddler looking at the pictures in my favourite book, Jacques Cousteau's *Ocean World*. I just loved underwater life. Whether it was in rivers, in the oceans or even looking through the glass at a public aquarium – I was addicted. I started taking pictures to record what I was seeing. There was no artistic drive. I just want record shots of what I saw so I show my family, none of whom like diving or snorkelling.

Where did you make your first dive?

I first breathed underwater in the swimming pool at school, when I was 13. I was already a very keen snorkeller and even had an underwater camera. I always thought diving was in my future and I remember thinking to myself, 'I wonder if I will be doing this for the rest of my life?' Since then I have made more than 3500 scuba dives in the ocean with a camera.

What do you enjoy most about diving?

Photography! Ok, the experience of being underwater is a lot of fun. Being weightless, being able to move freely

in three dimensions. Jacques Cousteau said that freed from gravity, underwater man becomes like an angel. In truth, most men become like big kids! It is an amazing place to spend time.

The wildlife is a massive draw too. On land people place great stock in locations where land wildlife is unafraid of man. Places like the Galapagos Islands or the Antarctic, where animals don't fear the human silhouette. Well, pretty much everywhere in the oceans this is how wildlife behaves. So if you play by the rules, you are rewarded by exceptional wildlife encounters on a regular basis.

You have a PhD in marine biology, so how did the transition from marine biologist to professional photographer evolve?

In an unplanned way! My career strategy from when I was at school was to work as a marine biologist and this focus meant I had completed my PhD by the time I was 25 and was happily working as a scientist. I was taking underwater pictures through this time, winning awards, getting published, but happy that my photography was a hobby. I was very proud to be an amateur shooter, feeling much freer to experiment and develop my own style than I feared professional photography would allow.

Post PhD, I worked as a researcher until I was 29. During those years I finally was earning a living, and my photography really blossomed as I was able to travel more widely and buy top-level gear. Soon, I was getting more offers of assignment travel than my generous leave from the University could support. So at 29, 10 years ago now, I decided to give full time photography a go. At the time I was single, I was clear of student debt and this felt like the most sensible time to try something so seemingly irresponsible!

But I did set myself a target. I saved up money during my last year of work and gave myself 18 months to be regularly matching my monthly pay from the University, or I'd go back to science.

Where is your favourite diving location for photography and what species do you photograph when there?

For me the underwater world is about diversity. At the broadest stroke it is an alien world right here on our planet. The biodiversity is so much higher than on land. Land animals are of course a subset of marine life that have adapted to life on land. And even then species from sea grass to turtles, to whales, to penguins have returned to the oceans. So underwater photography for me has never been about one thing. There are many photographers who specialize in sharks. But for me the true story of the ocean is sharing everything from tiny sea slugs to the giant whale shark. Coincidentally, these are the subjects of my photos in the last two years of Wildlife Photographer of the Year!

“The underwater world is about diversity. At the broadest stroke it is an alien world right here on our planet. The biodiversity is so much higher than on land”



A female lionfish (*Pterois volitans*) on a coral reef, Jackfish Alley, Ras Mohammed Marine Park, Gulf of Aqaba, Red Sea

Nikon D2X, Nikkor 10.5mm f/2.8G fisheye, ISO 100, 1/125sec at f/13

© Alexander Mustard



A portrait of a tiny amphipod (*Lphimedia obesa*), approximately 8mm long, on top of a colony of deadman's fingers, a type of soft coral, Loch Carron, Ross and Cromarty, Scotland, North East Atlantic Ocean

Nikon D2X, Nikkor 10.5mm f/2.8G fisheye, ISO 100, 1/125sec at f/13

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The aptly named leafy sea dragon photographed beneath the Wool Bay jetty, Edithburgh, Yorke Peninsula, South Australia

Nikon D80, Nikkor 60mm f/2.8D, ISO 100, 1/50sec at f/13, flash

© Alexander Mustard





A group of Florida manatees (*Trichechus manatus latirostrus*) sleeping in the afternoon at Three Sisters Spring, in Florida's Crystal River. Manatees sleep on the bottom of this shallow spring, occasionally rising to the surface to breathe

Nikon D700, Nikkor 16mm f/2.8 fisheye, ISO 200, 1/100sec at f/16
© Alexander Mustard

“I have always admired the work of young photographers, who are often the most motivated to try something new and create new types of images”

overseas, so the bottleneck for equipment is invariably the baggage allowances of the airlines. Expensive excess baggage fees quickly cut into profits. So I am a walking encyclopedia on airlines and their allowances and I will always take as much gear as I am allowed.

First, I need diving equipment, which is heavy, although I typically have the lightest version of each piece of equipment on the market. My APEKS flight regulator is the world's lightest and lets me take an extra underwater flash on every flight! My main camera is a Nikon D4 in a Subal housing, but I like to travel with multiple formats as each has significant advantages in underwater shooting for different types of shots. So I also shoot with a Nikon D7100 in a Subal housing and an Olympus EPL-5 in a Nauticam housing. I use multiple fisheye, wideangle, mid-range zoom and macro lenses with each. I use strobes from Inon and Seacam. And need strobe arms, cables, etc to support and fire them. Then there are chargers, laptop, hard drive and any additional accessories, such as off-camera flashes, triggers, tripods, filters.

I am very charming at check-in and always try and be a helpful, rather than confrontational customer and usually I can get it all on board.

Flash is crucial for underwater photography – how do you go about it?

I give two-week long workshops on this question! In short, we need to use flash underwater to give our pictures colour, without it they will be monochrome blue. Natural light underwater is soft and diffuse. My standard lighting is to try and be consistent with this, illuminating the subject sensitively with soft, mellow, diffuse strobe light. This means multiple flashes (invariably two) with diffusers, on arms away from the camera to create a soft, directionless, illumination. That said, I use a great variety of strobe positions to create the lighting effects I want in my pictures. Choosing lighting techniques to complement the subject and emphasise what I want to say about it. Teaching all these techniques is one of the reasons my workshops are very popular.

Why is the Red Sea so popular with underwater photographers?

In Europe we are incredibly lucky to have the beautiful Red Sea so close. Underwater photography is so much easier in warm, clear waters. The reefs of the Red Sea are fabulous. They are rich with life, filled with endemic species and the scenery is composed of a colour palette that is uniquely alluring to my eye in all the world's reefs. The Red Sea is also filled with wrecks, and while it is not a wildlife story, I have just completed a massive project on the British World War II wreck the *SS Thistlegorm*.

Which do you prefer: scuba or snorkel?

I prefer scuba because it gives you time to wait, watch and observe. I like snorkelling too and to some extent it is a bit like choosing the right tool for the job. Like asking a photographer if they prefer shooting with a tripod or without.

Which lenses do you use and what determines your choice?

You cannot change lenses underwater, so each time you dive underwater you need to plan what you intend to

shoot. The positive is that this allows you to optimize the gear for the types of shots you are planning to shoot. I will even go as far as making a decision to shoot mainly horizontals or verticals before going in, so that my equipment and lighting is optimized for the shot. That extra level of optimization gives the final shots that level of polish that others lack.

Can you list the typical array of equipment you take when on location?

The majority of my underwater photography is done



A pair of blue sharks (*Prionace glauca*) cruise beneath the surface of the English Channel, off the coast of Penzance, Cornwall, England, UK. Chum, a smelly, minced dead fish, was used to attract the sharks

Nikon D4, Sigma 15mm f/2.8, ISO 800, 1/160sec at f/10

© Alexander Mustard

**You're the brains behind Magic Filters.
How did you come up with the idea?**

Using filters underwater has always been possible. But it was very hit and miss because a filter would only work at one specific depth. When digital cameras came along, which have adjustable white balance, I realized that the technique would now, finally, be user friendly. But the Magic Filter was never intended as a product.

“Although many marine species have formidable weapons, I have found the far majority to be very accepting and not aggressive”



A pair of Mayan cichlids (*Cichlasoma urophthalmus*) guard their fry in a shallow cenote pool beneath the forest canopy, Puerto Aventuras, Quintana Roo, Mexico
Nikon D4, Sigma 15mm f/2.8, ISO 400, 1/320sec at f/11, flash
© Alexander Mustard

I simply had an idea for a shot that was impossibly large to light with flash, so I wanted to develop a filter. I asked my friend Peter Rowlands to help me in testing different recipes and once we'd got the shot, he saw that potential in the product, that everyone would want one. So we went into business. We've not got rich, but it is very satisfying to see the results people have got with it, the awards they have won and, in a small way, how we've left our mark on underwater photography.

Underwater photography seems to be far more popular than it used to be. Why is this?

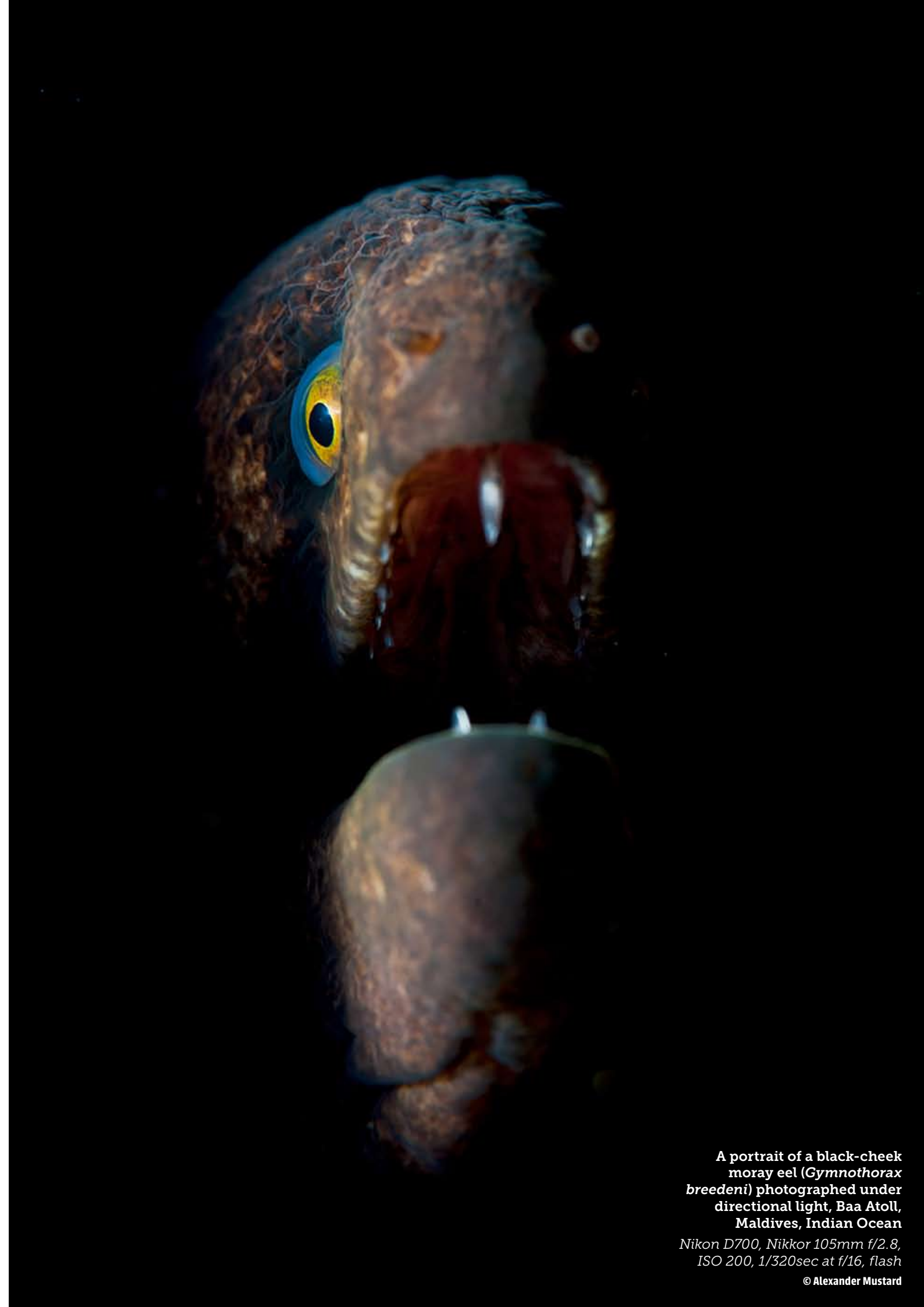
Digital cameras. On film it was hard to progress and learning was a long and laborious process. First, on film, you could only take 36 exposures on a dive (as you can't change a roll underwater). Second, using flash, you really had no idea how your lighting was working until you got the roll back. The LCD screen shows you immediately what you have done right and what you have done wrong. Finally, on film if you underlit a subject it would be blue. On digital the auto white balance will come to your rescue and restore the colours. In short, digital cameras make it much faster to learn and can even help hide your mistakes!

What percentage of images do you delete and why?

A very high percentage. Editing is crucial to maintaining your reputation as a photographer. If you put good and average shots out there, people think you are average. Only put good ones out and people think you are good. If an image is not going to enhance or maintain my reputation, I don't see the point in keeping it. I used to keep shots of any subject I didn't have that was of a publishable standard. Then I'd get the request for that subject and think do I really want that average shot out there with my name on it. For me the answer is no. I'd rather miss out on the earnings in the short term for the sake of my standing as a photographer. I've occasionally fantasized of inventing a fictitious photographer who supplies libraries with the images that fall below my best work!

You recently got married. Were you ever tempted to have an underwater wedding?!

Ha, ha! No. Both of us work with the ocean, so we didn't want it as part of our wedding day. Eleonora works in marine conservation at the Joint Nature Conservation Committee. We both love diving and taking pictures underwater, but our honeymoon was a non-diving trip to the Galapagos.



A portrait of a black-cheek moray eel (*Gymnothorax breedeni*) photographed under directional light, Baa Atoll, Maldives, Indian Ocean
Nikon D700, Nikkor 105mm f/2.8, ISO 200, 1/320sec at f/16, flash
© Alexander Mustard

Where do you derive your photographic inspiration?

From all over. I love looking at great photography. A few years ago I made a list of the nature photographers whose work I really love. Not simply admire or like, but really love. And it hit 150 names very quickly! It makes you much more sanguine about competition success or failures, when you think of all the amazing photographers trying to squeeze into the placings at each major contest. I have always found inspiration equally from different branches of photography. For

example, as an underwater photographer I am inspired by great underwater and great land images of nature. I am inspired by big names as well as lesser known photographers. I have always admired the work of young photographers, who are often the most motivated to try something new and create new types of images.

Which marine life species do you never tire of photographing?

Most of them to be honest. I am trying to think of something that I don't particularly enjoy...I think I am

overexposed to the stingrays in Grand Cayman, which are always hugely popular on my workshops. I very much go there, usually twice on each workshop week, for the benefit of the group, not my own portfolio.

Which subject or assignment has presented you with the biggest photographic challenge?

As an underwater photographer, a lot of my commissioned shooting is travel related, rather than wildlife, visiting destinations and shooting the marine

life and scenery for scuba magazines. These shoots are often very short, just a couple of days in a location, and you know that the editor and other photographers will be comparing this to their portfolio from a two week shoot. The result is that you stick to the tried and tested. You tend to repeat shots that you have done before. You feel like a musician, forced to repeat their greatest hits, rather than create something new. This is certainly a frustrating aspect of professional photography.

Last year you were named European Wildlife Photographer of the Year, which was a breakthrough for underwater photography. Was this your greatest moment as a photographer?

Don't get me wrong, I am very proud of the award, but you should never take awards too seriously. I was very pleased it was a shot of mine that won, as it was something really original underwater, and when the luck comes your way, and you win big, you want it to be with a shot that really represents the best of your photography, not with a shot that everyone says, 'I've got that shot', or 'X has got a much better version of that'!

Sharks, sea snakes, blue-ringed octopus – there are plenty of dangers in the oceans. Which has been your most hair-raising encounter with marine life?

In general, although many marine species have formidable weapons, I have found the far majority to be very accepting and not aggressive. The exception was my encounter with a poorlonemaledolphinwho,lackingfemalecompanionship, was very aroused and spent ten minutes trying to mate with me underwater. Dolphins are pure muscle, as you would expect of an animal that can leap many metres out of the water. And this one was pushing me around and even biting. Fortunately, I was able to surface safely.

“Sadly, I have to fly more than I'd like. Like a lot of wildlife photographers, I leave a pretty heavy carbon footprint”

This long, one second exposure of a juvenile harlequin sweetlips (*Plectorhinchus chaetodonoides*), records the movements of the 'dance' that this fish deploys as a means of defence from predators. The dance may mimic the movements of poisonous flatworms or may simply confuse predators. Dauin, Negros, Philippines, Bohol Sea Nikon D4, Nikkor 105mm f/2.8, ISO 100, 0.8sec at f/25, flash © Alexander Mustard





Portrait of the normally solitary, bohar snapper (*Lutjanus bohar*) in an annual spawning aggregation in June, Ras Mohammed Marine Park, Egypt, Red Sea
Nikon D100, Nikkor 105mm f/2.8, ISO 200, f/13, flash
© Alexander Mustard

A comical situation could have turned very dangerous very quickly. Unfortunately, my friend had a video camera (search for *Stinky Dolphin Hepps* <http://www.youtube.com/watch?v=IlaZis3KQl8>), although he did keep my surname out of it and edited the video to just show the funny bits, as we didn't want the dolphin to be persecuted.

When you're not diving you seem to be flying to the next dive or flying back.

How many dives do you make in a year?

I usually average close to one a day. I often have fun on Facebook charting when the number of dives is

ahead of the day of the year. Sadly, I have to fly more than I'd like. Like a lot of wildlife photographers, I leave a pretty heavy carbon footprint. For my last book *Reefs Revealed*, I offset all the carbon from the flights involved in shooting that project. I had hoped it might start a trend in wildlife photographers who are often the most widely travelled people I know.

Where are you off to next and what will you be photographing?

After the Wildlife Photographer of the Year awards and Wildscreen Photography Festival, I am off to Egypt, hopefully for oceanic whitetip sharks, and then also in November to Raja Ampat in remote Indonesia, for the world's most amazing reefs. It will be my third trip there in 2014.



Dr Alexander Mustard is an award-winning underwater photographer, whose work is published widely in international titles including *Diver*, *Ocean Geographic*, *Sport Diver*, *Scuba*, *Wet Pixel* and *The Art of Diving*. He is the current European Photographer of the Year, the inventor of Magic Filters for available light underwater photography, and runs popular workshops from the Cayman Islands to the Red Sea.

Alex is a speaker at this year's Wildscreen Photography Festival, on two topics: *Making Your Work Pay* (Saturday, October 26) and *The Best Picture I Took By Accident* (Sunday, October 27)

For more information and to book tickets:

<http://www.wildphotos.org.uk/>

<http://www.amustard.com>

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