



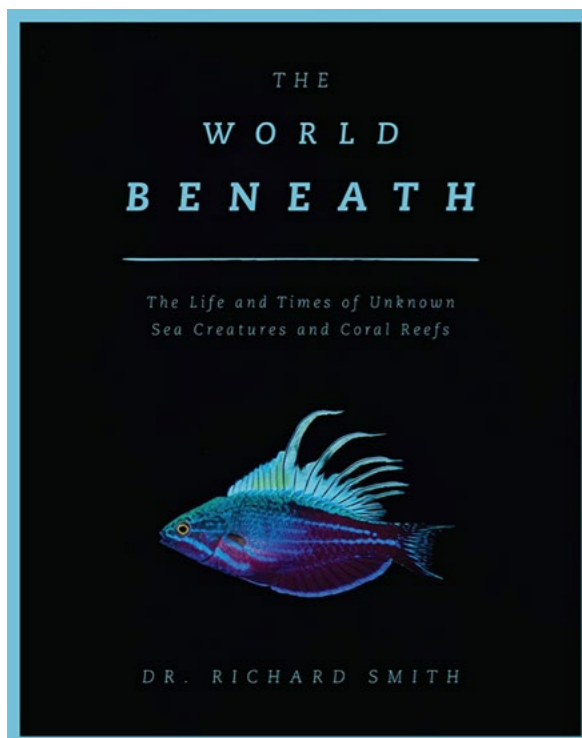
Feeding reef manta ray in the Maldives

Edited by Peter Symes

Interview by Peter Symes
Photos by Dr Richard Smith

— In this series of intriguing interviews, DecoStop Q&A seeks to learn more about the people making waves in the dive world.

In the first of the series, we meet British award-winning underwater photographer, author and marine conservationist Dr Richard Smith, who is the author and photographer of the bestselling new book, *The World Beneath: The Life and Times of Unknown Sea Creatures and Coral Reefs*.



Smith's bestselling book from Apollo Publishers



Interview with

Dr Richard Smith

— Bestselling Author, Underwater Photographer & Marine Conservationist

What is your first memory of becoming aware that there was such a thing as diving?

A friend of mine learnt to dive with his father when I was about 15. Until you know someone that has dived, I think it

can seem like quite a scary prospect. I have always been obsessed with nature and the opportunity to reach a whole new world of animals piqued my interest.

When did you decide that it was something you would like to try?

A year after hearing about diving, my dad and I decided we would give it a go too! We were planning to visit some friends in Australia, so we thought it would be a good opportunity to dive on the Great Barrier Reef. We decided to do the training in the United Kingdom before

we went, to maximise our time enjoying the reef. Both my father and I had been severely injured after being hit by a car whilst walking on the pavement outside our house a few years prior. I had been very sporty, but the accident meant that most types of physical activity were



Huge swells crashing through an overhang in West Papua, Indonesia

Walea soft coral pygmy seahorse found only in a small Indonesian bay, Togian Islands, Indonesia

no longer possible for me. It turns out that diving was perfect in allowing me to stay active, whilst indulging my love of animals.

When and where did you first become certified?

I grew up in a land-locked part of the United Kingdom, quite far from the coast, so we were fairly limited in options. We ended up doing the open water part of the training in a freshwater quarry. I was sixteen and had no idea how much learning to dive would change my life.

What was your first dive experience like? How did you feel afterwards?

Let's just say, it was lucky we had already planned the Australia trip! We did four dives in the quarry in November. There was frost

on the ground and a freezing fog. We wore drysuits and the water was 4°C. I was disappointed that after four dives I had only seen a couple of tiny fishes and one crayfish.

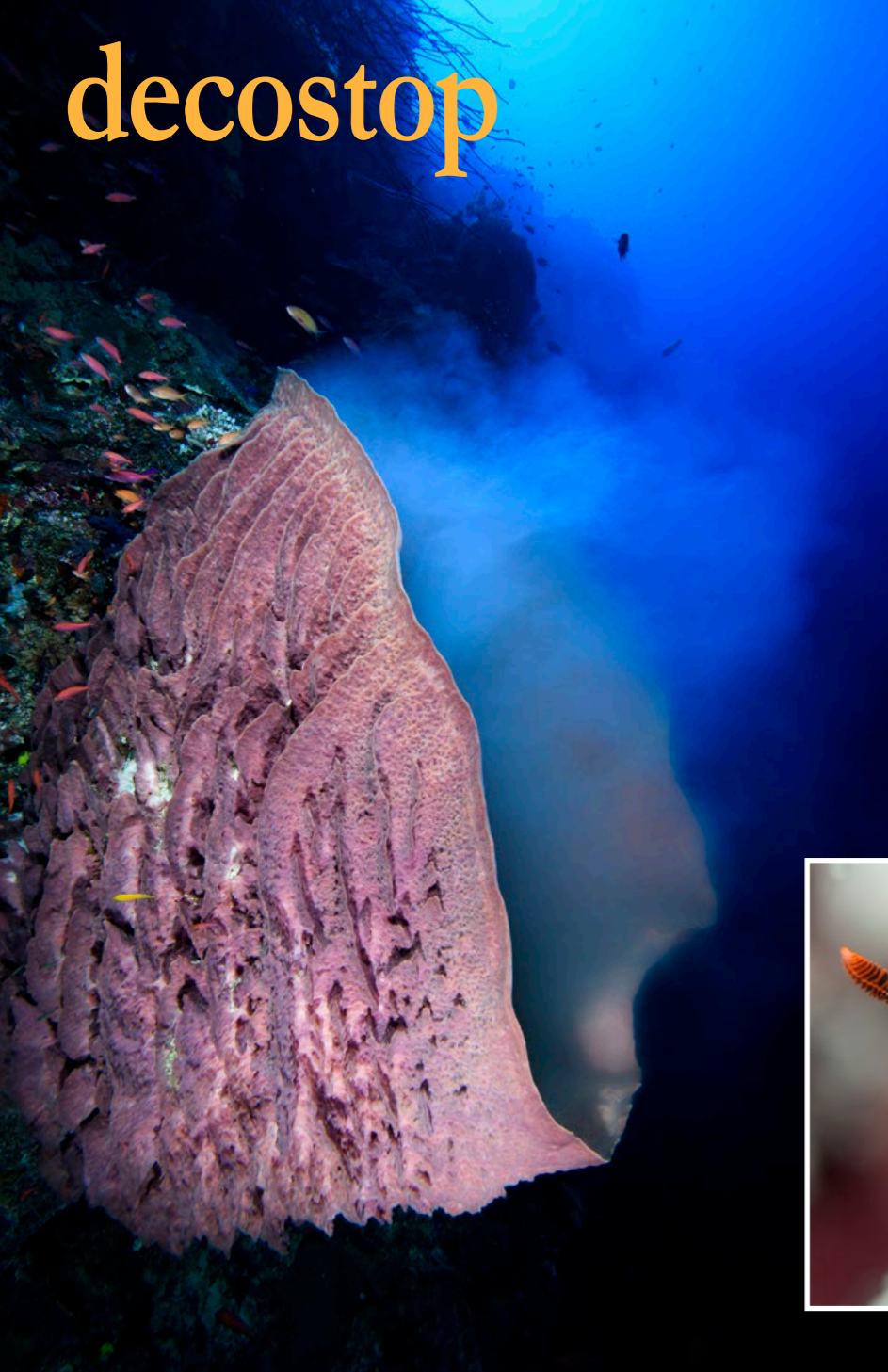
When did you start doing photography?

I had been working on a marine conservation project in Indonesia and was getting frustrated that the tiny nudibranchs (sea slugs) that I was finding were impossible to identify. Many were in fact new to science and undescribed, but I was scouring the books and struggling to identify the species based on the rudimentary sketches I had made on my slate. I started taking some images to enable me to get some proper identifications. I made about 500 dives before I started to take up photography properly, and I am really pleased that I had the opportunity to hone my diving and



The pink anemonefish is one of thirty anemonefish species that live with these stinging corals, Solomon Islands





CLOCKWISE FROM TOP LEFT: Giant barrel sponge, many decades old, spawning, Tubbataha Reef, Philippines; Soft corals on a bustling reef in West Papua, Indonesia; Male Banggai cardinalfish with a mouth full of babies, Sulawesi, Indonesia; A pair of golden pygmy gobies hiding in a soda can, Sulawesi, Indonesia; *Nembrotha kubaryana* nudibranch, Sulawesi, Indonesia



buoyancy skills, as well as my critter-hunting ability, before taking up photography.

When were you able to combine diving and photography?

I have always used photography to help with my natural history studies, whether capturing never-before-photographed fishes or trying to figure out the life cycle of an animal too small to study with the naked eye. My experience, however, suddenly became vital when I began my doctoral research on the biology of pygmy seahorses. I used very close-up

shots under the trunk of the pygmies to distinguish between the male and female.

Males have a small slit-like opening, and females, a tiny raised circular pore. Without these shots, it would have been impossible to tell them apart. I also captured the first images of the pygmy's full reproductive cycle, which were vital for my work.

What made you decide to become a biologist?

As soon as I heard the word, I wanted to become a zoologist. I think I was about five. Ever since I can remember, I have

been fascinated with the natural world, so it was a natural progression. Growing up, I had a menagerie of pets, but was also a gardener from about seven years old! I think my destiny was set in stone from a young age.

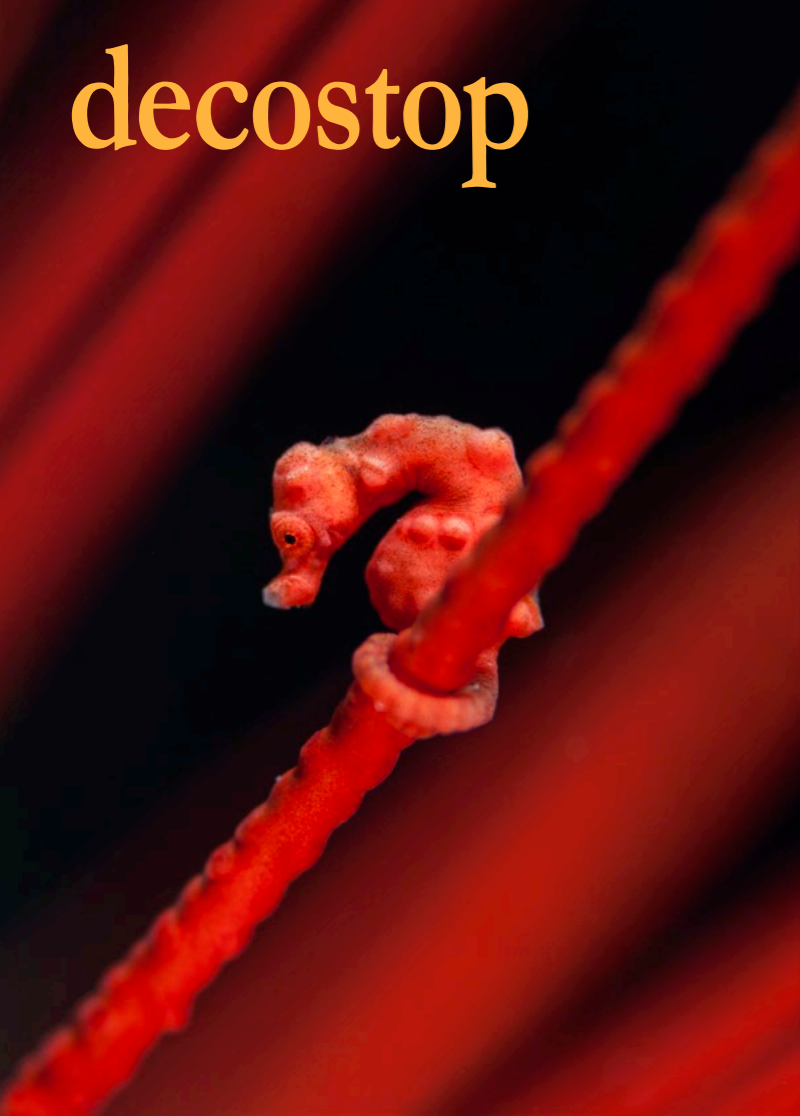
When photographing underwater, what steps do you take to avoid interfering with marine life?

I am very passionate about this subject, and diver interactions with pygmy seahorses were actually part of my doctoral research. I strongly believe that the best photographs are taken when an animal feels secure and not threatened. As soon as an animal is disturbed, the fight-or-flight response kicks in. I do not own a pointer

may take a minute or two to settle after I arrive, but soon they will resume normal activities. I do not move around too much and only take shots when there is a frame I want. There is no point in taking dozens of shots when you only need one or two.

What is the most interesting or intriguing (animal) behaviour you have come across on your dives?

I have been lucky enough to observe so many mind-blowing behaviours during my work. Something that stands out was part of my doctoral research on the



Denise's pygmy seahorse (above left), which measures the diameter of a quarter, Sulawesi, Indonesia; Denise's pygmy seahorse on a gorgonian coral, Sulawesi, Indonesia (above right)

reproductive and social biology of Denise's pygmy seahorses. I spent hundreds of hours recording their interactions. One group of four pygmies—nicknamed Tom, Dick, Harry and Josephine—were an interesting bunch. Among the many amazing behaviours I observed with this group, the most surprising was watching them fight. Ordinarily, seahorses are fairly passive, but these three males vied for Josephine's attentions, which regularly led to fist-cuffs! In the pygmy seahorse world, where there aren't fists to settle disputes, the males would try and strangle each other with their tails!

If you have to offer just one tip or piece of advice for an aspiring underwater photographer, what would it be?

I think something that is often overlooked is how important it is to become a good diver before becoming too distracted by photography. Good buoyancy, experience in different conditions and learning about marine life (if you want to take images of creatures, rather than vistas) are all really important skills.

What is your favourite piece of kit?

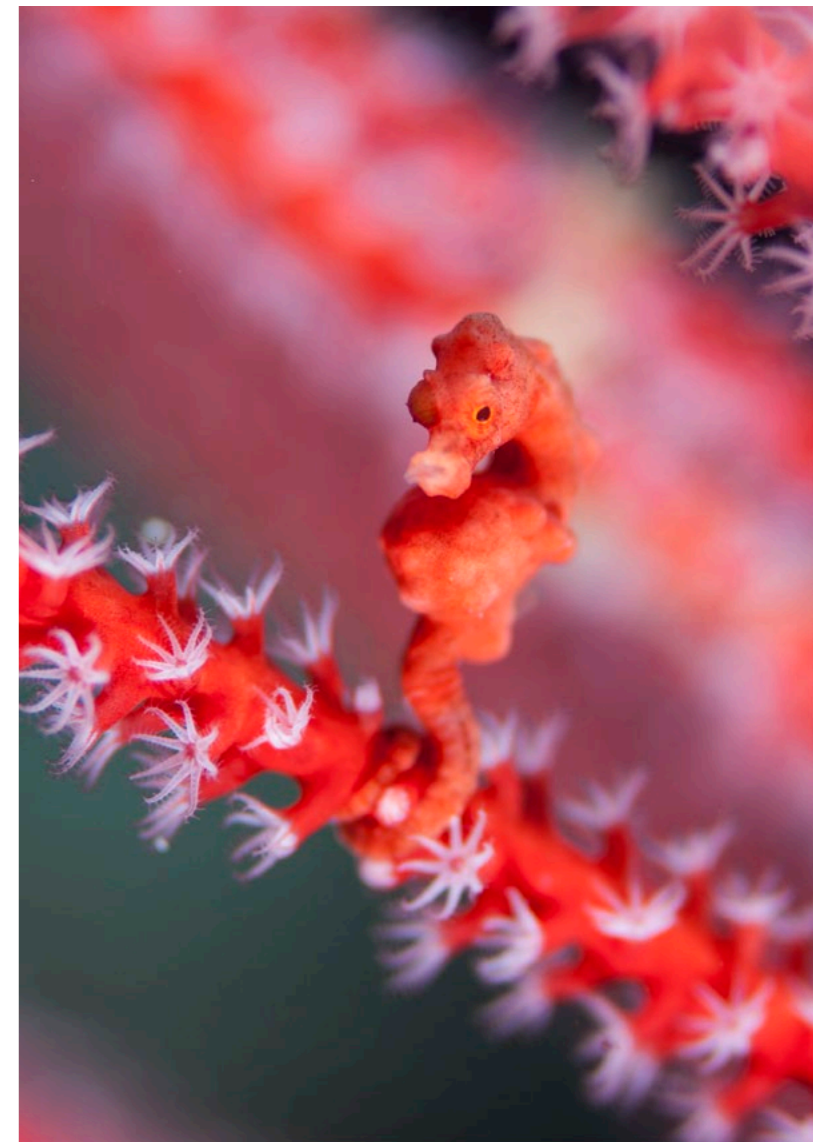
One piece of kit that I almost cannot do without is a hooded vest. I get pretty chilly as I dive so slowly, even in the tropics, and a 3 to 5mm hooded vest under my suit helps to keep me that bit warmer.

What is the oldest piece of kit you still use?

Most of my gear does not get swapped out if it is still doing the job, and I appreciate brands that are built to last. I still use my arm slate from goodness knows how many years ago—maybe 15 years now. I cannot do a dive without it; I always write down everything I see and details of where I find them. It is also great for writing down any ideas I may have. I get those on a dive, not in the shower!

What type of habitat do you find most interesting and why?

I love to dive all kinds of habitats, there is always something different to see. I love diving in different regions, where there might be interesting indigenous species to find. For instance, muck diving



A pair of tiny and well-camouflaged Bargibant's pygmy seahorses, Sulawesi, Indonesia (above left); Denise's pygmy seahorse on a whip coral, Sulawesi, Indonesia (above right); Displaying male blue flasher wrasse, measures just two and a half inches long, West Papua, Indonesia (top right)





Smith

Tiny juvenile hogfish comes face-to-face with a hidden frogfish, Negros Island, Philippines (above); Aggregation of sand tiger sharks sheltering in a cave, New South Wales, Australia (left)



in Japan was very fruitful and full of species you could not find elsewhere in the ocean.

Which subject matter have you found most challenging to capture?

My friend Juliette Myers shot an amazing image of a giant clam shrimp, which really caught my attention. I had been looking for giant clam shrimps for the longest time, having seen a picture of a preserved specimen. The specimen was transparent with blue spots, so I assumed it would be found on the outside surface of the clam. Having seen Juliette's shot, I realised that I had been looking in the wrong place all along. In fact, they live deep inside the body cavities of giant clams, which is quite a challenge in terms of underwater photography and lighting. As most

divers would know, if you get close to any bivalve mollusc, they quickly slam shut to protect their soft parts. Needless to say, I have spent many hours hovering outside giant clams waiting for the few seconds when a giant clam shrimp decides to wander within view.

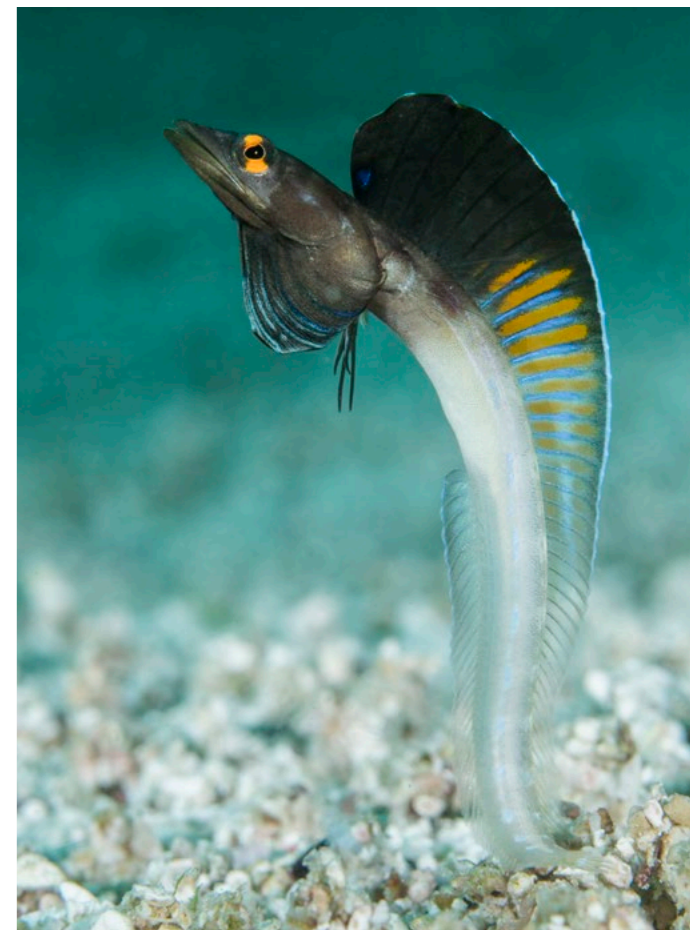
If you had to pick just three of your own images to hang on your wall, which ones would you pick and why?

I think they would all have to be pygmy seahorses, to make a nice triptych! Denise's pygmy was the main focus of my PhD, so that would be there. Then, there would also be the two pygmy seahorses that I have named over the past couple of years: *Hippocampus japapigu* from Japan and *H. nalu* from South Africa.

If you have to think back on an experience (or a course) that left you all the wiser, which one springs to mind?

I think I learnt a lot from diving with my friend and incredible dive guide Yann Alfian. He showed me my first pygmy seahorse in Komodo in 2002, and our careers seem to have been intertwined ever since. He is the most incredible spotter but stands out by having the most amazing natural feel for animals and their behaviours. I learnt a lot from him about how to sensitively approach a shot and how important it is to know where exactly an animal lives if you want to find it.

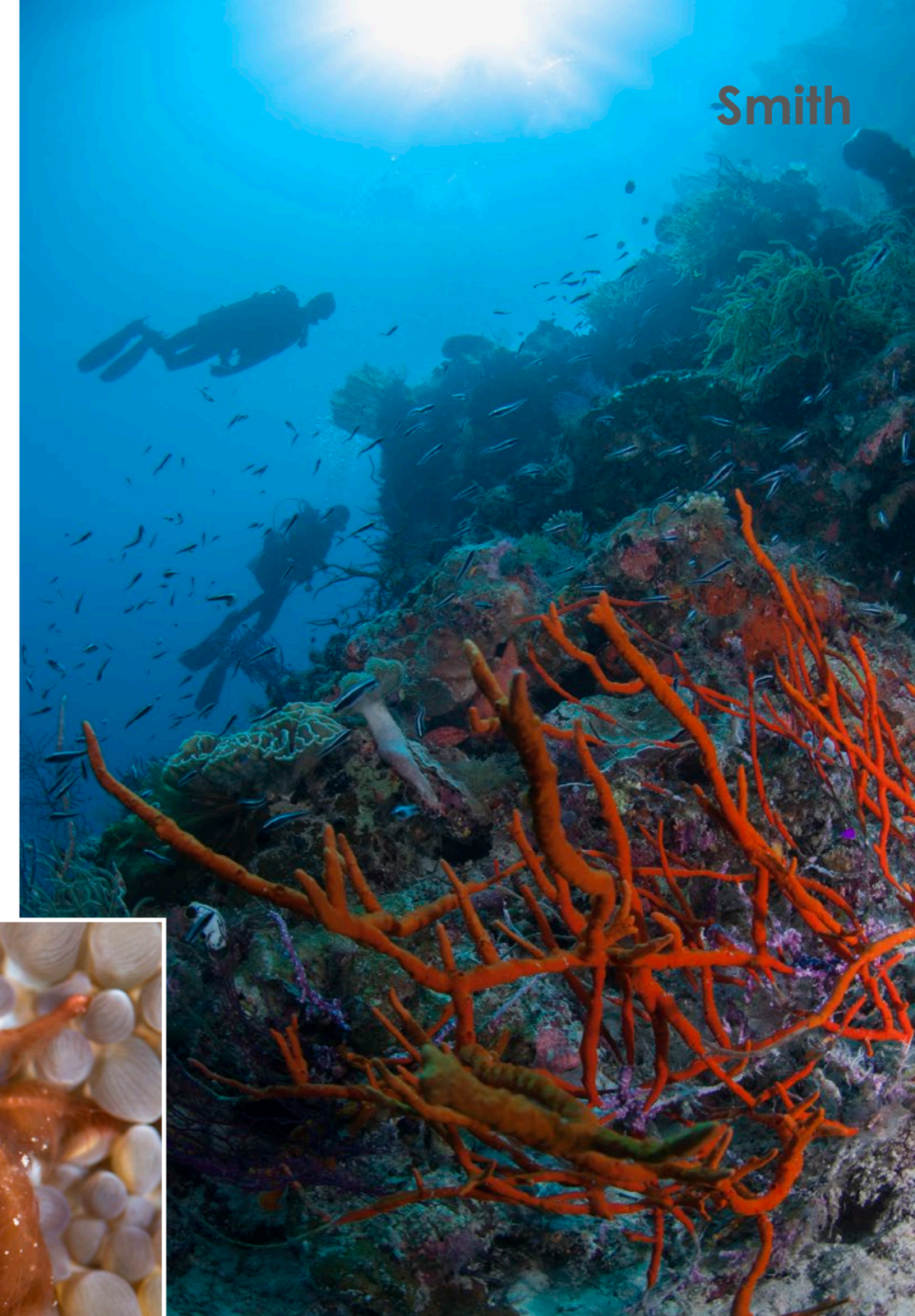
As a scientist, photojournalist and communicator, do you have a main message or philosophy you are striving to convey?



Male Galapagos pike blenny displaying, Galapagos Islands, Ecuador

The endangered Napoleon wrasse, one of the largest reef-associated fish, feeding on a damselfish, West Papua, Indonesia





I hope to be a bit of a champion for the smaller, underappreciated creatures of the sea. The whales, turtles and sharks get all the glory, but there is an incredible diversity of smaller animals under the sea that also need protection and are often overlooked. The goal in my book *The World Beneath* is to share some of these creatures and their fascinatingly complex interactions and private lives. Some of the tiniest creatures have a vital part to play in the Earth's marine ecosystems; however, regardless of this, each one makes the world a richer place.

Which type of dive do you enjoy the most?

I love spending a whole dive (or day, or week) really focusing on one animal. I love watching its comings and goings, interactions with other animals and learning what makes a particular animal tick. I find it quite meditative.

What is your next big project?

Colleagues and I are working on another discovery from the trip that yielded the South African pygmy seahorse. So, that is exciting! I have also started turning my

attentions to a follow-up for *The World Beneath*. ■

Dr Richard Smith is a British award-winning underwater photographer, author and marine conservationist who aspires to promote an appreciation for the ocean's inhabitants and raise awareness of marine conservation issues through his images. A marine biologist by training, Smith's pioneering research on the biology and conservation of pygmy seahorses led to the first PhD on these enigmatic fishes. Smith is a member of the IUCN Seahorse, Pipefish and Seadragon Specialist Group. He

has named the two most recent pygmy seahorse discoveries: Hippocampus japapigu in Japan and H. nalu in South Africa. Smith organises and leads marine life expeditions where the aim is for

participants to get more from their diving and photography by learning about the marine environment. His bestselling book, The World Beneath: The Life and Times of Unknown Sea Creatures and Coral

*Reefs, is out now. Learn more at: **OceanRealmImages.com** or follow on Instagram **@Dr.RichardSmith**, on Facebook **@OceanRealmImages**, or on Twitter **@Rich_Underwater**.*

Divers exploring a coral reef in Sulawesi, Indonesia (above); An orangutan crab covered in filamentous red algae, Great Barrier Reef, Australia (centre inset); Feeding whale shark, the planet's largest fish in West Papua, Indonesia (top left)