

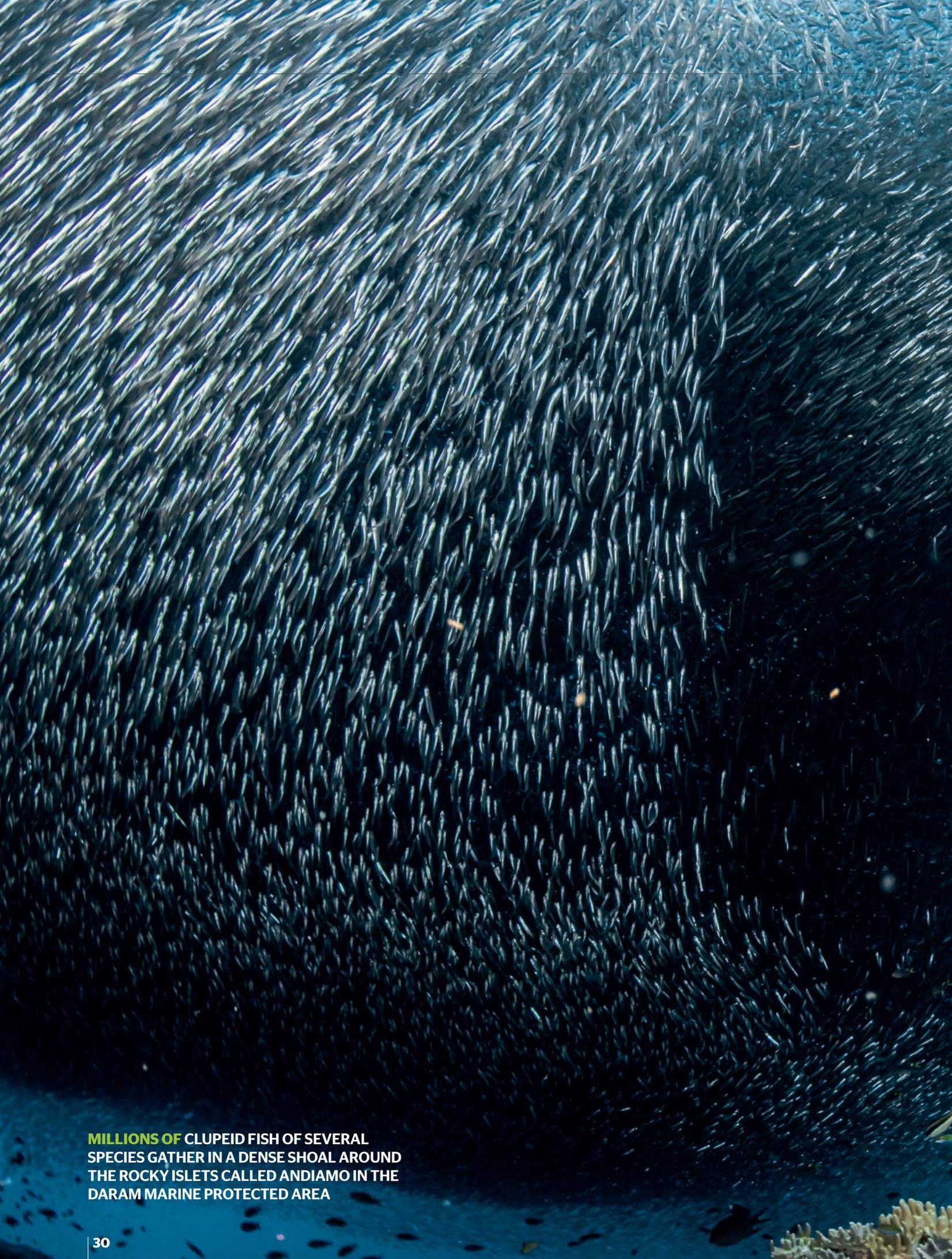


**A DIVER SWIMS THROUGH BOO WINDOWS, ONE OF THE BEST-LOVED DIVE SITES IN THE MISOOL ECO RESORT NO-TAKE ZONE**

# **PARADISE** *regained*

Can the wonders of  
Raja Ampat be  
protected from man's  
folly? Words and  
photographs

**DOUGLAS SEIFERT**



**MILLIONS OF** CLUPEID FISH OF SEVERAL SPECIES GATHER IN A DENSE SHOAL AROUND THE ROCKY ISLETS CALLED ANDIAMO IN THE DARAM MARINE PROTECTED AREA



**F**

or as long as I have been a scuba diver, the question that is most frequently asked is: 'Where is the world's best diving?' This is not an easy question to answer. And the more experiences one has and the more places one goes, the harder the answer becomes.

This is because scuba diving has a different meaning for each person depending on their tastes, their goals and their abilities. Some people prefer the sea life of temperate and polar seas; others want nothing cooler than equatorial tropical waters; still others adore freshwater lakes. Some must have 30m visibility; others cannot abide current. Some people are wreck junkies; others covet caverns and caves. There are photographers, videographers, spearfishermen, shell collectors, tech divers, bounce divers, divers who don't go below 10m. The variations are endless.

But I do know what the question means. What a person is really asking is where do you rate and why? And would I like it too, or would I think you are barking mad?

For me, if there was one and only one place to choose, I would say, unreservedly, it would be the reefs of Raja Ampat, Indonesia. I have been fortunate enough to visit many times and spend

the Philippines; Timor-Leste; Papua New Guinea; the Solomon Islands; the east Malaysian states of Sabah and Sarawak on the Island of Borneo; and the Indonesian Archipelago from Papua to the southeast end of the island of Java. (Note: Some researchers now believe the borders of the Coral Triangle should be extended to include Brunei, Singapore and Peninsular Malaysia, for conservation and management practicalities, if not the exact criteria of biodiversity.)

One of the true wonders of the natural world, the Coral Triangle accounts for but one per cent of the planet's surface yet contains 30 per cent of the world's coral reefs and those reefs are themselves comprised of 76 per cent of the world's known hard coral (reef building) species (some 574 species identified thus far, of which 15 are endemic). The Coral Triangle is also a hotspot for its numerous species of soft corals (octocorallia), which are widely distributed throughout the region and occur in varying concentrations and shapes and sizes with vivid hues virtually every colour of the neon rainbow. The hard coral and soft coral reefs provide the perfect habitat to a plethora of reef dwellers, thousands of species of invertebrates (mollusks, cephalopods, crabs, shrimp, and the like) as well as nearly 1,400 species of coral reef fish (52 per cent of Indo-Pacific reef fish species; or 37 per cent of the world's reef fish species) and nearly 3,000 species of fish occur in the region – the greatest concentration of which occurs in the Raja Ampat/Birds Head Peninsular region. The Coral Triangle is home to half of the world's sea grass species and 45 mangrove species (one fifth of all the world's mangroves are contained within Indonesia alone), as well as more than 20 species of cetaceans, the dugong, six of the world's seven sea turtle species, saltwater crocodiles, two species of manta rays and an unknown number of species of sharks, including a sizeable population of the largest shark species, the whale shark.

Does it sound too good to be true?

Well, time for a reality check. The truth is far less glossy. Into every paradise falls the darkness. In this instance, man, or to be more specific fisherman! Not your average subsistence fish-catcher, but the greedy, profligate fisherman out to feed more than just himself and his family.

With a time machine to take one back 30 or so years, the reefs of Raja Ampat must have been as nature intended. A perfect balance of predators and prey in a tremendously rich environment created over millennia by elevated sea temperatures with sea levels rising and falling more than 100m during different eras to create geographical opportunistic bridges and waterways or isolated, exclusionary pools for protracted periods of geological time; transport of larvae from elsewhere into the region alternating with closed systems leading to a high degree of endemism

**Into every paradise falls the darkness. In this instance, man, or to be more specific fisherman**



many hundreds of hours on its reefs. Raja Ampat's reefs surpass any other reefs in the world in terms of fish, invertebrate and coral abundance and diversity, sheer drop-dead, scenic beauty and the variety of diving conditions and topography.

Raja Ampat is an archipelago of 1,500 islands and islets adjacent to and including the Bird's Head Peninsula of West Papua, a province formerly known as Irian Jaya, comprising the western half of the island of Papua, the world's second largest island, the Indonesian-claimed half of the island of New Guinea, (autonomous Papua New Guinea comprises the southeastern half).

Raja Ampat is located in the very heart of the Coral Triangle, the planet's most biodiverse and rich tropical marine ecosystem. The Coral Triangle encompasses the seas and islands of six countries:

**A PAIR OF CORAL GROUPERS**  
HUNT THEIR PREY AMONG  
THE LUSH TOPOGRAPHY AT  
BOO WINDOWS





**A SCHOOL OF SURGEONFISH**  
HOVER AT A CLEANING  
STATION AT NUDI ROCK



**A SHOAL OF FUSILLIERS**  
SWIM AMID THE PROFUSION  
OF HARD CORALS AT  
MELISSA'S GARDEN, FAM  
ISLANDS







**A MAP PUFFER** HUNTS FOR  
INVERTEBRATES AMONG THE  
GORGONIAN CORALS AT BOO  
WINDOWS



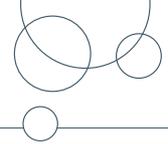


**A BLUE RINGED** OCTOPUS  
BLENDS WITH THE CORAL AT  
THE CEDANA PEARL FARM  
DOCK IN ALJUI BAY





**A SHOAL OF SWEETLIPS ARE A PERMANENT ATTRACTION AT OTDIMA REEF IN THE DAMPIER STRAIT**



**A WOBBERGONG SHARK  
PATROLS THE REEF FLANKED  
BY A FLOTILLA OF JUVENILE  
GOLDEN TREVALLY**

have created what is called a 'species factory'.

But the worldwide scourge of shark fishing and the live fish trade have left their mark on this rich oceanic paradise. Shark fishermen have hit remote Raja Ampat particularly hard and seeing a shark off the reef, except in a few protected areas, is exceptional, not the norm. Remoteness is no protection for sharks: wherever there are reefs, fishermen will seek out their prize.

Fortunately, a range of non-government environmental organizations and some committed individuals have worked with local people to not only preserve what is left but to actively work for a better future. With sustainable quotas and with protection such as closed seasons on certain fish species and marine protected areas, fish populations can rebound. Depending upon species, the rebound can take as little as a decade or two in the case of broadcast spawners creating millions of eggs each breeding season, such as groupers and snappers or up to a half-century or longer in the case of slow to mature, low number of offspring animals, such as marine mammals, sharks and manta rays.

The sad reality is the animals the hardest to replace are the ones who are most noticed when they are absent, both in terms of an out-of-balance ecosystem running off-kilter and in terms of the

tourism value charismatic megafauna brings to a destination.

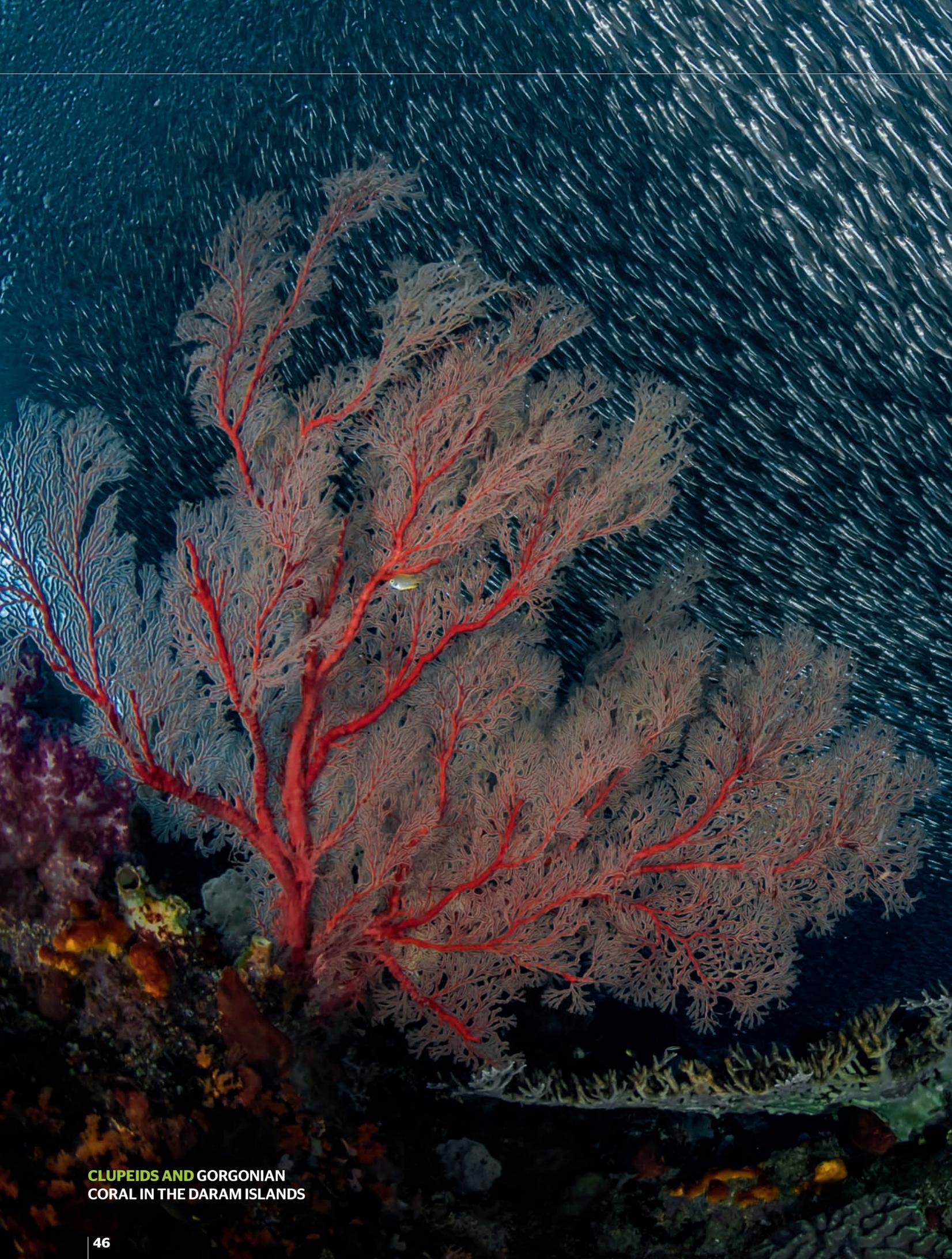
The result of scientific rapid assessments by two US-based NGOs, The Nature Conservancy and Conservation International, the alarming decline of reef predators was ascertained in the mid-2000s. With both persuasive conservation-friendly pressure and generous financial support from these outside collaborators, the government of Raja Ampat created the first marine protected areas in May 2007, a network of seven areas around Misool, Kofiau, West Waigeo, the Ayau-Asia islands and the Dampier Strait. These marine protected areas were meant to be set-asides so that the fish populations could rebound. The problem was enforcement, difficult with limited resources and a vast area of 35,000 sq km to cover. Shark fishing continued, perhaps not as prominently as before, but in remote parts of the archipelago the slaughter still took place.

For Andrew and Marit Miners, conservation comes instinctively. Andrew had been on pioneering liveboards exploring the reefs and waters of Raja Ampat. He had a dream and a vision. He found an island called Batbitim near some of his favourite dive sites to the southeast of the island of Misool. The island was uninhabited except as a base camp – for shark fishermen. The



**A SWEETIPS** AND CORAL  
GROUPE AMID THE BLACK  
CORAL TREES AT SARDINE  
REEF, DAMPIER STRAIT



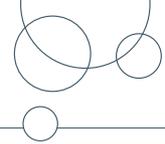


**CLUPEIDS AND GORGONIAN  
CORAL IN THE DARAM ISLANDS**





**AN OCEANIC MANTA** GLIDES ABOVE MAGIC MOUNTAIN, ONE OF THE FEW DIVE SITES IN THE WORLD WHERE BOTH REEF MANTAS AND OCEANIC MANTAS SHARE THE SAME CLEANING STATIONS



rightful owners of the island were the clans in the village of Yellu on the island of Misool. In 2005, Andrew met with the village leaders, discussed his vision of building a resort on Batbitim island, discussed how he could employ people from Yellu to staff the resort and laid the groundwork to create a No Take Zone around Batbitim and the dive sites he knew were world-class destinations and would remain so if the reefs and fish were allowed to thrive without fishing pressure. In time, a long-term lease was agreed upon and the work of building a resort from salvaged wood and low-impact construction techniques (lots of man-power, few power tools) commenced. It took two years but eventually the resort opened.

It was a long, difficult road and has taken many years, but now Misool Eco Resort is considered one of the top ecologically benign resorts in the world and the scuba diving offered on the surrounding reefs is without equal. More than 150 villagers work in some capacity at or for the resort and a dozen men from the village have taken on the responsibility of becoming park rangers, patrolling the 1,220 sq km Misool Eco Resort No-Take Zone in two dedicated speed boats financed from private donations. It is difficult and dangerous work, with long hours. The reward is preserving the marine heritage for future generations of children from Yellu and for people from Indonesia and the rest of the world. When a fishing boat is found illegally fishing within the MER NTZ, the rangers have the authority and the determination to arrest and impound the vessel and to take it back to Yellu, where the village council, headed by the Kepala Desa, decides the fate. The illegal fishermen are almost always from a remote part of Indonesia where the local fish and shark populations have become commercially extirpated. Usually, these fishermen have no license to operate in Raja Ampat waters. But once caught in the NTZ, their fate is in the hands of the Yellu villagers. Typically, the boat will be impounded, the catch confiscated and a fine levied. Then, once restitution is made, trespassers are free to go, albeit without their boat.

But what happens when the rangers catch a boat illegally fishing outside the MER NTZ? This has always been the problem. Once out of bounds, there really was no set policy on illegal fishing in Raja Ampat except to say it was bad, to write down the perpetrators names and to force the boats to disappear over the horizon.

All of this changed at the end of 2012, as the parliament of Raja Ampat enacted a ground-breaking piece of legislation creating a 46,000 sq km (17,760 sq mile) sanctuary for sharks, manta rays, sea turtles, dugongs, certain species of fish – with specific prohibitions against destructive fishing practices, including explosive blast fishing, purse seine, muro-ami netting, and the collection of fish for aquariums. It also established unambiguous penalties for law breakers.

This is a first for Indonesia. Unlike the usual hand-wringing and appeasement to commercial special interest groups that bogs down any kind of

conservation measures in the West, the Raja Ampat parliament cut through the nonsense and declared: ‘Local regulations are set by the principle of the precautionary approach; the consideration of scientific evidence; the protection of the natural structure and the function of marine ecosystems; the protection of fish species and genetic quality of fish, and the use of biodiversity that supports sustainable marine tourism.’

The regulations state: ‘Dugong, fish, whales and animal species, including marine turtles are protected within the marine waters of Raja Ampat.’

In the appendices included in the document are, just so there is no misunderstanding, specific families of sharks protected under this legislation: whale sharks, thresher sharks, mackerel sharks, sawfish, nurse sharks, bamboo sharks, zebra sharks, guitarfish, hammerhead sharks, requiem sharks, and shark rays.

And with an eye to those who had slipped through the loopholes of an absence of legal penalties in the past, the regulation declares: ‘Any person and/or legal entity who knowingly committed, ordered, performed, and/or participated in activities... so as to reduce the number of populations of species of certain fish and endemic fish species is threatened with imprisonment for a maximum six months and/or a maximum fine of Rp 50,000,000.’ (50 million Indonesian Rupiah equals USD\$5,156 or £3,458; the amount exceeds the per capita yearly income for the majority of Indonesians.)

The regulations leave the administration of justice to the local villages, respectful of the



**With protection and time, anything is possible**

importance of continuity of the Papuan culture.

In time, if the regulations are upheld, and the illegal fishing is eliminated, especially explosive blast fishing and shark and ray fishing, then the waters of Raja Ampat may return to the paradise they must have been perhaps as recently as 30 years ago. With protection and time, anything is possible. Marine life is resilient and can rebound if the pressure is taken away and the wanton killing ends. With time, perhaps even paradise can be regained. I hope it happens in my lifetime. ●

**Douglas would like to thank Marit and Andy Miners of Misool Eco Resort, and its enthusiastic and generous staff members Calvin Beale, Hery Seputro, Bram Doali, and Dady Alqadry for sharing the best dives in the world. [www.misoolcoresort.com](http://www.misoolcoresort.com)**