



66 Out of nowhere, the water to our left begins swirling. In a matter of seconds, a whirlpool as deep as a man has formed like a black hole **The current is** so strong you can hear it roaring like a waterfall against the rocks. At full throttle the tender is not moving. At all.

Out of nowhere, the water about three metres to our left begins swirling. In a matter of seconds, a whirlpool as deep as a man and the width of a dining table has formed like a black hole, sucking everything into its vortex. The boat starts to spin. Erwin moves quickly to engage the second motor and we accelerate hard to safety, away from the furious water. I can't help but wonder if being here is a good idea.

Yet it's entirely by choice. We have crossed from the Pacific to the Indian Ocean, through a tiny channel through which megatons of water flow in a manner that brings to mind the birthing analogy of trying to squeeze an object the size of a watermelon through an opening the size of a lemon.

Time for a little bit of context

We are near the island of Alor, in a unique cetacean hotspot where Benjamin Kahn has seen not only multiple species of dolphins, but also blue whales, and even orcas predating on sperm whales. This is the climax of a truly epic journey. We are looking for cetaceans – blue

whales and hammerheads. For science. For art. And for conservation.

Under the assured guidance of Benjamin Kahn we are crossing the remote Banda Sea, from Ambon to Kupang, on a one-of-a-kind expedition organised by Underwater360. Ben has been researching the whales in the Banda Sea for years, but getting solid opportunities to get out and survey is difficult – it is expensive, and most liveaboards make crossings at night, to maximise day light for diving. We have set up this trip in collaboration with the new, luxury liveaboard the *Samambaia*, so that the focus is covering as much water as we can during the day, to collect vital data on the whales using this sea – data that will go a long way to helping protect them.

Bringing together dive industry professionals at the top of their field, passionate guests here for a uniquely enriching experience, we are on a mission to better understand the cetaceans that use this unique corner of the ocean, and to demonstrate that an exciting adventure can help support research and conservation. Not everyone on board is a diver, some guests, like Thomas and Anita, are here to experience the cruise by snorkelling and whale watching.

№ THE CAST OF CHARACTERS

The Underwater360 Contingent

Dada Li: Is she real? Dolphin-like in the water, softly spoken, peace and love lighthouse, effortlessly beautiful inside and out, an ethereal creature from another (aquatic) dimension. ADEX Ambassador of Freediving

Aaron Wong: Renaissance man. Fastest shutter in the East, postmodern philosopher, driest sense of humour on the boat, exceptional diver. ADEX Ambassador of Photography

Benjamin Kahn: "Pak Paus" (Father of the Whales), an intellectually acrobatic and easygoing Dutchman, internationally recognised as one of the world's most eminent cetacean experts. Head of APEX Environmental

Pepe Arcos: The brooding Spaniard. Impossibly modest two-time Spanish freediving record holder, multi-award winning filmmaker, profoundly creative soul

Judi Lowe: The smiling heavy hitter. Soon-to-be PhD, rumoured to hold the key to sustainable marine tourism, the most intimidating CV this side of the Tropic of Cancer.

Alan Lo: Cool as a cucumber, Hong Kong's best underwater shooter, blue finned and sharp eyed

Connie Chen: Hawk-eyed observer, nap master, collector of stylish and novelty equipment, editor of *AD* and *SD Chinese*

Alice Grainger: Yours truly. Senior editor of *Asian Diver* and *Scuba Diver AUSTRALASIA*. Overly enthusiastic expedition instigator.

The Samambaia Family

Gian Paolo Fanchini: The gruffly peaceful pirate. Italian epicurean, gastronomer, generous owner of the magical Samambaia, heart the size of a blue whale's

Johannes Hennicke: Tallest German cruise director in Indonesia (aka the boat's third mast), on-board diplomat, caring manager of foibles, determined dive dream weaver, and fellow expedition-mastermind

Frankie: The "Rasta Tuna", a grinning, muscled vision in tek gear and mirrored shades.

Ricky: Critter spotting champion, quietly elfish, safety ninja, like a seahorse

Debbie and Dani: Our stand-in parents, anticipating needs we didn't even know we had

The Intrepid Guests

Hilda & Marcel Lüthi: Inseparable sweet hearts, wet-suited up to dazzle us as Swiss parrotfish

Anita & Thomas Koenye: The touch of class, unassuming pioneers, laughing in the face of broken ribs and phobias

Rachel Mason: Whale spotter extraordinaire, thrill-seeking adventuress and destroyer of personal limits

Nikki Friedli: Resident comedienne, hilarious in the face of adversity. And a little bit sunburnt.

The Banda Sea is diverse and healthy. Dada Li and Pepe Arcos work on capturing striking images in this ocean paradise.

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THE SAMAMBAIA: POSSIBLY THE BEST LIVEABOARD IN THE WORLD?

Now, none of us on this trip are strangers to liveaboard; between us, we've seen quite a few. But the verdict on the *Samambaia* was unanimous – it is the best boat any of us have ever been on.

The Bugis craftsmanship and attention to detail on this vessel are second to none. We were swaddled in the luxury of expert carpentry, with every need catered to by the attentive crew. Added bonuses were free nitrox, free beer (a very welcome surprise), food that (incredibly) got better with every meal and spanned the gamut from Italian to Indonesian, Chinese, and catered to all (of our rather difficult) dietary requirements.

With everything that you would expect from a boat of this calibre (things like two breakfasts, one with eggs cooked to order, mid-afternoon snack, fine wine, top-of-the-line tenders, organisation and crew tight as a chorus linel, but with just that little bit more: fresh towels presented on the deck after every dive, high thread count cotton sheets and velvety-soft comforters on the the bed, fresh Italian coffee on tap, artisanal olive oil on every table, biodegradable shampoos and soap.

Every detail has been considered, and it all contributes to the total sense of relaxation and comfort that characterises this exceptional experience. The *Samambaia* really is a liveaboard like no other.

Today we are trying to get the "money shot": the ethereal Dada Li swimming with the whales. A group of spinner dolphins is about 10 metres from the boat. Dada, Aaron and Pepe slip off the tender and into water that drops to about 400 metres. It is dark, soupy, the currents are running, and it is filled with planktonic life that could have been designed by George Lucas. They fin towards the melonheaded whales as quickly and quietly as they can, Dada spyhopping to get a bearing.

Then the surface erupts. Dolphins leap into the air like lunatics, hundreds of them, spooked as wild horses, they gallop like maniacs until they are over the horizon. Turns out Dada's dive computer has let out an innocent little beep. This is going to be a challenge.

We can't give up though, no matter how much Aaron's legs are burning. Getting this shot is one of the trip's missions: Images of humans in the open water with some of the oceans' most captivating species are a vital weapon in the fight to protect these animals.

But it doesn't look like anyone has explained this to the whales.

Our expectations have been high since day one, when, after just an hour at sea, we had our first blue whale sighting. For most of the trip we are blessed with regular encounters: pods of spinner and spotted dolphins throwing themselves into the air with hilarious abandon, using the bow waves of the boats like a fairground ride, sperm whales diving to forage in the depths, melon-headed whales treating us to little glimpses of their smiling white faces as they peek at us through the surface, and blue whales showing off their massive flukes as they dive.

The Underwater 360 Expedition

Team. From left to right: Aaron Wong, Alice Grainger, Thomas

Koenye, Anita Koenye, Judi Lowe, Rachel Mason, Nikki Frieldi, Marcel Lüthi, Hilda

Lüthi, Benjamin Kahn, Dada Li, Johannes Hennicke, Connie

Chen. Alan Lo. Pepe Arcos

Spinner dolphins leaping into

the air near Alor, too spooked to let us get close in the water Seeing them in the water, though, is much trickier than most of us had realised. These creatures are wild and timid.

BANDA AND ITS WHALES

The Banda Sea is unique. Other than the Mariana Trench, this is the deepest piece of water on the planet. Shaped like a massive amphitheatre, it is also unusual in that the whole gamut of coastal/maritime geography is found in very close proximity – beaches here border waters that are several kilometres deep, seamounts and volcanoes rise from the depths. The area's remoteness is also special: There are very few people, many uninhabited islands, and very little commercial maritime activity.

All of these characteristics make the Banda Sea a very important habitat for whales, and specifically for blue whales, which migrate thousands of kilometres every year, from the Southern Ocean, up the west coast of Australia, entering the Banda Sea through a narrow corridor. In 2015, 24 blue whales were sighted here over the course of a few days – an unheard of aggregation for an animal that is supposed to be predominantly solitary.

Why are they coming? Scientists like Ben Kahn are still unsure. Possibly to mate or calve, but only further research, hopefully facilitated by trips like this one, will reveal the answers.



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EPIC JOURNEYS

The part with all the birds and snakes (though not as many as there should be)

Our whale patrol is punctuated with dives on some of the world's best sites. Sites like Gunung Api, or "Snake Island".

It is remote. Waking up, the sun is rising behind the volcano, which, in turn, climbs from around 4000 metres from the seafloor. Vegetation grows down its fertile slopes, pocked by crevices that no human eye will ever see, nooks and crannies where the famous snakes lay their eggs safe from predators.

The air is thick with bird calls. Seabirds wheel overhead, chasing another boat's tender like a cloud of midges. Frigates harass the gannets, worrying them into regurgitating their undigested fish for a stolen meal. This primordial island seems remote enough that it will likely still be here, inhabited by birds and snakes, when the rest of the world finally "Trumples" into chaos.

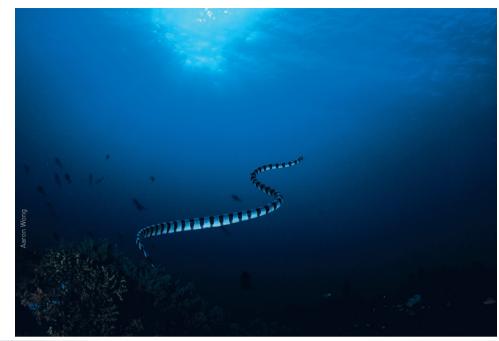
Volcanic rocks boulder into the water where the rich ecosystem is mirrored below. Sun beams glitter into

the depths, where the viz is 20 metres plus, bumpheads graze, and sea snakes are picking off small needlefish in the shallows. Gentle surge breaks against the rocks. No hammers here, but tuna, barracuda, massive silver snappers.

Frigate birds perch clumsily on the rigging, the crew are fighting a losing battle against the quano raining down onto the plush deck furnishings. As the sun thinks about setting, we take the tender closer to the volcano for a more intimate look at the birds. What a unique little land mass. It's remarkable concentration of seabirds - frigates with their croaking mating call and red, scrotum-like throats, comical blue footed boobies, terns, and redtailed tropic birds. One lonely (and clearly lost) grey egret wades into the shallows, somehow blown off shore and now destined to live out the rest of its life as the only egret in the village. I hope she's got an aptitude for languages...

Joking aside, this is what is known as an "IBA", an Important Bird Area. It is indeed the only place where this diversity of bird life exists in the Banda Sea.

Unfortunately, the hand of man is in evidence even here – we do see a number of snakes and kraits. but not as many as we should. It is likely that many of them are now holding up people's trousers, or swaddling loose change.







SOUNDS OF THE SEA

The hydrophone is a souped-up underwater microphone that passively picks up the sounds of the ocean, and is able to sample out sections of bandwidth to hone in on the sounds of the whales we are after. In good conditions we should be able to detect sperm whales (the loudest of the cetaceans) up to 10-12 km away – well beyond the horizon – while oceanic dolphins can be picked up from a distance of about 2-3 kilometres.

where the ground a distance of about 2-3 kilometres. It is a much more effective way of finding deep divers than watching for them from the surface, especially (in the case of sperm whales) when they can be underwater for up to 40 minutes at a time, giving us only 10 short windows each day where they are with the face they are with the face. where they are visible from the boat. Once we have picked them up acoustically, we can get a bearing and then head over in the hope of a closer sighting.



(Spoiler alert: We are still looking for whales)

From around six in the morning each day, Ben, Johannes and Rachel take up their positions on the top deck, alerting us to every sighting. When we find whales, everything stops. Even lunch.

Ben has sacrificed a hefty portion of his luggage allowance to the hydrophone, a high-tech piece of acoustic monitoring equipment that is indispensable when it comes to hunting for cetaceans.

Clockwise from top left: A banded sea krait swims up for a breath, frigate birds perch on the Samambaia's rigging, a blue whale dives to forage, divers dwarfed by ancient barrel sponges - a hallmark of





EPIC JOURNEYS

We get so close at times that we can detect fishy wafts of whale shrimp-breath

At one listening station, through the hydrophone's static, we hear the staccato clicks of a pod of sperm whales to the south – a tantalising acoustic glimpse, but on this occasion they are too far away for us to catch up with them. It is still a small window into the rich sonic world that these animals inhabit.

Though even without this nifty piece of kit, we are more than equipped for whale watching: Ben possesses an incomparable wealth of knowledge and experience and a warm and passionate personality that means that we are all the grateful recipients of a never-ending stream of information. We learn about their migrations (both vertical and horizontal), spyhopping (when they peer at us up through the air), rooster-tailing (slapping their flukes on the surface), dive times, foraging behaviour, migrations, whale prints (an "oily" patch of water left behind when they dive), social behaviour, interactions with people, threats to their survival, and much more.

The experience is further enriched by the boat's impressive cruise director, Johannes Hennicke, who, for years, has been working on and off with Ben on trips similar to this one. Johannes is almost as good as Ben at spotting whales on the horizon, and at times their communication seems almost telepathic, as they work with the Samambaia's crew to manoeuvre us into the best position for close-enough-to-smell sightings – yes, we get so close at times that we can detect fishy wafts of whale shrimp-breath.

SONIC INTERFERENCE SONIC INTERFERENCE

For cetaceans, sound is one of their most vital senses. Their voices carry over massive distances – communication which is indispensable in keeping them connected, and navigating their habitat.

Ocean noise is an often overlooked form of pollution. Oceans today are about 50 times noisier than they were in pre-industrial times. Shipping is a big contributor, and is a constant source of sonic interference for cetaceans.

These acoustic creatures need to be able to detect the sounds of things like tuna feeding on baitballs, but these days, in busy areas, hearing this kind of activity is akin to trying to have a conversation on a busy street. As a result, they must work harder for their food as they can't find it as easily

While shipping is a chronic problem, seismic surveys for the petrochemical industry is acute and extremely loud, as is much submarine military activity. These intense bursts of deafening sound have been linked to cetacean deaths and strandings.

(b)
Clockwise from bottom left: Soft corals cover the substrate, Dada Li and Alice Grainger freediving at Gunung Api, a hammerhead "scout", schooling hammerheads in their hundreds, Dada Li silhouetted through the heart-shaped crack in the reef





The part where we all become whales

Having the freediving superheroes on the trip, ADEX Ambassador of freediving Dada Li, and award-winning freediving filmmaker Pepe Arcos, pays dividends. And not just because they are lovely, fascinating people. One day, between whale patrol and diving, they treat us to a mini freediving workshop, letting us all get in touch with our "inner whale". We take our new skills out to the open water, and most of us are converted into freediving junkies.

That bit where hammerhead dreams come true

Each dive seems to be more dramatic than the last. We finally reach "the secret spot", a jewel of the Banda Sea. It doesn't disappoint.

Just 20 minutes into the very first dive, like an army on patrol, around 160 beefy predators transform the blue water into a wallpaper of hammerhead sharks. It's a sight most of us only associate with the Cocos Islands or the Galápagos. Yet here they are, almost guaranteed in these huge numbers, in Asia, right in our backyard.

At this spot, these sharks are also known to ascend into unheard-of shallow depths at sundown, spotted at five metres or less to be cleaned before the nighttime. After a visit to the people living on this speck of an island in the middle of nowhere, we jump in for another go around as it starts to get dark...

But today they have decided that the shallows are not the place to be. The dive is still fantastic – moody water, massive tuna torpedo past, the biggest barracuda I have ever seen hangs off the reef. The place is almost indecently fecund.









THE PEOPLE MAKE THE PLACE

Is seems like it would be tough living on a storm-swept island, days from civilisation, with no fresh water and limited electricity. You would imagine that these conditions would breed a hardness in people, and that for them every waking moment would be spent in the service of tasks related to survival.

So imagine our surprise, when, on landing on "Hammer

So imagine our surprise, when, on landing on "Hammer Island" we were met with a pretty village with brightly coloured flower beds, cloves drying in the sun, and offers of refreshment in the form of fresh young coconut and dried banana. This was not what we had been expecting.

Of course, for the people on Hammer Island, life IS hard, there is no denying it. With few boats coming past, produce like sugar, rice and coffee is hard to come by. Drinking water is a precious commodity, as is petrol for the few generators. Weather here can be extreme. But there is a lightness about them, a positivity that is impossible to ignore.

Under the gentle leadership of a man who has been reelected every four years for the last 16, the little villages here comprise a knowledgeable and dedicated community. Young adults return from their studies in Ambon to live here and raise

adults return from their studies in Ambon to live here and raise families, for health and healing they rely on hundreds of native medicinal plants, the uses of which were discovered by the first settlers here some five or six generations ago. They grow coconuts and the cloves that once conferred such fame to these 'Spice Islands"

But pressure is felt. The people here do what they can to deter fishers from other places from shark finning and using dynamite on their precious reefs, but with only rowing boats, there is only so much they can do. Underwater we see some of the damage these "off islanders" have wreaked.

As a small gesture of thanks for letting us moor here and dive the reefs, the Samambaia leaves sacks of the goods they can't get hold of, as well as a radio and a few gallons of fresh water. It is a small gesture that goes a long way, and the chief comes to say a blessing for our afternoon hammer dive. They also gift us with bananas and coconuts.

These people, and people like them on other islands, are the guardians of the Banda Sea, and they will ultimately be the deciding factor in the future of its marine life. It remains to be seen what lies in store, but what is sure is that on Hammer Island at least, there lives a wise group of people, dedicated to these waters. This community, if recognised, engaged, supported and empowered, could ensure not only the future of these stunning reefs, but could also safeguard an abundant future for their inheritors











The part where we ask ourselves, "Is this the best muck diving in the world...?"

The day after we survive the white water rapids, we moor in an unassuming looking little bay for the night. A very modest village lines the beach and bits of trash dot the water (plastics that could spell a nasty death for the cetaceans we have been watching). Despite Johannes' assurances about the quality of the diving. we are unconvinced. Until we descend.

The reef is so purple (violet sponges, lilac corals, mauve tunicates, vermillion urchins) it needs to be named "Purple Haze". Which would also be appropriate given the sheer volume of trippy critters swimming before our masks. Mimic and coconut octopuses, robust ghost pipefish, devilfish, countless juveniles, emperor and harlequin shrimp, decorator crabs, frogfish, white faced waspfish everywhere, seahorses, mantis shrimp (spearers and smashers); we are stopping every few metres over the black sand, squealing with delight through our regulators.

The water is cold, just 19 degrees in places. We still manage a dive of well over an hour, though, the chill held at bay by our excitement.

World-class muck diving sites offer copious sightings of critters such as these seahorses, coconut octopuses and mantis



EPIC JOURNEYS



That time when the orcas showed up...

On the last day, the ocean attempts to console us in the face of the impending end of the affair: It blesses us with orcas, just as we are cruising into the setting sun. We all lose our minds. This is the sighting we have all been secretly hoping for. Two massive, proud dorsal fins penetrate the surface, gleaming like PVC. It could be a mother and calf. They dive. We stop, scanning the horizon for their ascent.

Then the penny drops. This explains why the listening stations for the past days have been so quiet – these are the apex predators of the sea, and Ben tells us they will clear a vast area, causing all other cetaceans, even the big ones, to go into stealth mode to avoid being detected by these lupine beauties. No doubt those spooked spinners of a couple days ago had already encountered this pod of hunters. This would explain why the whales we have been seeing have been so reluctant to let us get close.

Sadly for us, even the orcas don't want to stick around, and while we spend more than two hours trying to get close enough to rouse their natural curiosity, they remain unnaturally evasive, leading us to speculate as to why. Have they themselves been hunted recently...?

The sad bit - we have to leave

Stepping on to terra-firma, we are hit by the lurch of land-sickness; it feels like a lot like waking from a dream. Every one is changed: We have learnt so much, seen so many wonders, laughed with new friends so hard that our faces hurt. We are all enchanted, stunned by the epic, imposing beauty of the Banda Sea.

This is an extraordinary area in the truest sense of the word. One of the Earth's few really remote places – no planes fly overhead, hardly another boat to be seen. Tourism here is only just taking off, and there is still time to do it right. SDAA

DOING IT FOR THE CAUSE

This trip was about more than taking out some big industry names to have a great time underwater. We had an incredible opportunity here to get people excited about protecting the ocean.

Ben Kahn, through his organisation APEX Environmental, and in collaboration with the Coral Triangle Centre, has been working with stakeholders around the Banda Sea for some years to try to generate increased support for the conservation of this unique little patch of ocean, before it becomes exploited by tourism or extractive industries like commercial mining and fishing.

With this expedition, our combined skills and reputations could be brought to bear to promote the value of sustainable marine tourism – to get local governments, NGOs, universities, dive operators and other stakeholders onside, and keen to engage with the mission to help the Banda Sea become a genuine "eco-tourism" destination, now, while it is still so pristine.

This was too good an opportunity to pass up. So, in both our port of departure, Ambon (the regional capital), and our final destination, Kupang, Ben mobilised his network and the whole expedition team was invited to present at two very slick events.

With our secret weapon, PhD candidate Judi Lowe, sustainable marine tourism specialist, our charismatic freedivers, Dada and Pepe, and image maker Aaron Wong, we formed a dream team, a crack squad, all of us honoured to be able to share our passion for the underwater world (and especially for this special little corner of it) with the people who will be responsible for its future.

It could not have gone better. One Course Director in Ambon was so inspired by the expedition that he shared with us the the very secret location of "Hammer Island", a site that rivals Cocos and Galápagos for its hammerhead aggregations. In Kupang, where we were able to show footage and stills from the trip and communicate our palpable excitement about the destination, we were bombarded by questions, invitations and requests for support to help develop the Banda Sea's tourism industry in the "right way".

We all left on a high, buoyed by the enthusiasm of our new network, and aware that this was just the very beginning of what looks like an epic journey indeed.

Stay tuned to SDAA+OP and Asian Diver for more in-depth stories from the UW360 Expedition. Learn more about the whales that live here, the efforts to conserve them, and be the first to see Pepe's film of the expedition – now in production!

