

A full-page background image showing a scuba diver in silhouette, swimming horizontally over a vibrant, healthy coral reef. The water is a deep blue, and sunlight filters down from the surface, creating a shimmering effect. The diver is wearing a mask, snorkel, and fins, with a tank on their back. The coral reef below is diverse, with various shapes and colors of coral.

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CONSERVATION

THE LIFE AQUATIC

As ever-growing mounds of trash continue to find their way into the oceans and the mercury keeps rising, **Nayantara Jain** of **ReefWatch India** talks damage control and rehabilitation for India's coral reefs



ver the 105 minutes that Nayantara Jain spent underwater in the Bay of Bengal one January morning, she had all the usual visitors: Crabs “the size of half a fingernail” burrowing into the sand, crocodile fish that are experts at camouflage, slow-moving sea turtles, burly barracudas, flamboyant parrotfish and flying fish. Amid this riot of colours, “I saw a giant shoal of fusiliers approaching,” she says. From where she stood on the seabed, it looked like “golden arrows falling from the sky.”

Being underwater, according to Jain, is much like going on a wildlife safari. Except, “on land, humans might be identified by the animals as predators, and thus something to be wary of. Marine animals have no frame of reference for what you are,” she laughs over the phone, that afternoon, after her dive. “So you’re going to encounter either a deep curiosity (don’t be surprised if you turn around to see an octopus poking at you) or complete obliviousness to your presence.”

Jain’s passion for all things seaborne is infectious. When she isn’t waxing eloquent in school classrooms or at TEDx talks about the wonders pooling in our oceans, she’s uploading mesmerising mermaid-like selfies and stunning portraits of fish somersaulting in teal waters on Instagram. As the executive director of ReefWatch India – an organisation with a focus on coral reef research and conservation in the Indian peninsula – the 31-year-old has been operating out of Chidiya Tapu, a tiny village on the southernmost tip of the southern Andaman Islands, for the past five years. “We have the ocean on three sides,” she says, almost as if to invite you to dive into one of the only six coral reef outposts in Indian territory. “As you approach from Port Blair – an hour’s drive – the last 6-7 kilometres are just beautiful mangroves and virgin rainforests.”

ReefWatch India was founded in 1993 by advertising guru Prahlad Kakkar and his wife Mitali Dutt Kakkar, after they first went scuba-diving off the coast of Mauritius. “Prahlad *loves* to tell the story of what inspired him: Finding a copy of the Quran, not quite disintegrated, nestled among the coral reefs,” says Jain. Along with their scuba-diving school Lacadives, the Kakkars’ broader purpose back then was to raise awareness about marine life diversity in Indian waters. “It was important for us to communicate,” says Jain, who joined the fray a decade ago, “that coral reefs aren’t just pretty animals. They’re a whole habitat.”

Quick science lesson: Coral reefs might cover less than 1 per cent of the seabed, but are actually home to, and in a symbiotic relationship with, 20 per cent of all marine life on the planet. But, with global warming, and each subsequent El Niño phase and mass bleaching event (ie, the “heatstroke” they suffer in warming waters), their capacity to recover drops.

Jain notes that marine ecosystems can get left behind in the larger talk around natural conservation →

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in India. It's possible for us, sitting in landlocked cities, not to gauge the ecological importance of coral reefs, even if we do get their aesthetic value.

"Like rainforests or mangroves," she explains, "coral reefs buffer coastal human civilisation against natural disasters. You might also wonder," upon reading reports of global warming, "just how big of a deal a 'minor' 2-degree change in temperatures over a hundred years can be. That's until you're faced with the consequences."

A dive in the Andaman Sea, off the coast of Thailand in 2009, just after a mass bleaching event in 2008, revealed to Jain a terrifying seascape of whitened shrubbery, completely devoid of life. It's what pushed the philosophy grad and diving enthusiast to seek out a Masters degree in marine biology; and to understand that what's killing sea life is a complex cocktail of plastic waste, diesel fumes and fishing malpractice.

This January morning's dive was no recreational activity. Jain and her "team" of engineers and biologists had gone down to check on the eight metallic structures they've stuck into the seabed, as part of an initiative called Re(ef)Generate. "It's a sort of rescue programme," she explains. "We've been picking up broken or weakened fragments of reefs and transplanting them onto these structures; giving them a low-voltage electric current that, studies say, helps them grow 7-12 times faster and makes them more resilient to higher temperatures." They've also been "creating corals from scratch," incubating some in labs and transplanting them to the sea. "Think of it as afforestation. We're kind of rebuilding the reef."

The day we speak, they were also taking stock of the damage wrought by Pabuk, the cyclone that had just whipped its way through the islands in late December. "Mercifully, there was only some minor denting," Jain sighs over the phone. "But yes, the frequency of such events is increasing. Small islands like ours are always more vulnerable."

Jain realised early enough that, to sustain a regeneration project of this magnitude, especially when swimming against the tide of ever-climbing temperatures, engaging local communities would be crucial. "When people are unemployed," as they might be on an island that depends heavily on seasonal tourism for livelihood, "the last thing you can do is preach about plastic disposal."

Every day, she holds skill-building classes with kids from Chidiya Tapu and neighbouring towns (along with workshops for school and college kids from the mainland), training them to be divers or guides, or in any kind of occupation linked to their habitat. "I figured that a lot of these kids don't even know how to swim, let alone wear a mask and go snorkelling. We're trying to help them connect with the ocean."

As for the hordes of snorkellers, scuba-divers and general seaside revellers planning a visit – numbers that are bound to grow, with a brand new Taj resort on Radhanagar beach and easier access to Viper Island



Nayantara Jain; (below) Prahlad Kakkar and Mitali Dutt Kakkar



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– Jain isn't worried. Despite the rise in "negative tourism", she disagrees with the school of thought that, "if you remove humans from the equation, nature will be fine." She'd rather we stay aware of our consumption patterns: Realise that the things we dispose of don't actually leave the planet for a long time; pay attention to the ingredients in our grooming products; and understand that very little of all those gorgeous clothes we buy in fast fashion stores actually gets recycled or reused. "Conservation," says Jain, "has to be about finding a way for man and nature to exist together." ☺

WORDS: NIDHI GUPTA. IMAGE: SUMER VERMA (NAYANTARA JAIN)