Treasure By Lene Topp The success of the Philippines' Tubbataha Reefs The success of the Philippines a marine park can have the property of the part incurance a marine park can have the part of the part incurance a marine park can have the part of the part incurance a marine park can have the part of the part incurance a marine park can have the part of the part incurance a marine park can have the part of th

Natural Park is proof positive that the best insurance a marine park can have is the stakeholders' belief that, by protecting the environment, they are protecting their own interests







this page: Rangers living at the isolated Tubbataha ranger station (near left) consist of a joint task force taken from the navy, coast guard, and Tubbataha Management Office. Their presence helps enforce a strict no-take zone, and they catch poachers looking to fish valuable Napoleon wrasse (*Cheilinus undulatus*, far left) and turtles and sell to the Asian markets

opposite page: Tubbataha's steep walls feature the healthiest corals in the Philippines, a direct result of this area's status as a World Heritage Site

I CAN HEAR the waves as they gently lap at the posts of the ranger station outside. Inside, loud noise emanates from a lone television sitting in the corner. On one end, a brick game on a table and laughter; outside on the small terrace, herbs in wooden pots, Filipino rum on the table, and quick fingers strumming the strings on a quitar.

Far from family and relatives, a ranger celebrates his birthday in the middle of the Sulu Sea – 150 km from his hometown near Puerto Princesa, Palawan, Philippines – but the atmosphere in the isolated Tubbataha ranger station is almost like home. These rangers are a joint force taken from the Philippine navy, the coast guard, and the Tubbataha Management Office (TMO). They stay here on this small outpost, completely surrounded by water, before a new group relieves them every three months. They are here to fulfil a mission: to protect this rich marine World Heritage Site.

Their job is a vital one because, as a World Heritage Site, the Tubbataha Reefs Natural Park is a no-take zone, and only dive boats are allowed to enter the area. And though their job isn't an easy one, the rangers at the Tubbataha ranger station have become an effective law enforcement institution in their own right.

In December 2006 they had a big catch: a Chinese fishing vessel with more than 350 Napoleon wrasse – an internationally protected species – and hundreds of other reef fish in the vast hold. Thirty Chinese seamen were arrested, and the valuable fish were kept in an enclosure in Puerto Princesa until they could be released in March 2007 back into the Tubbataha Sea.

FOWL WEATHER FRIENDS

Tubbataha Reefs Natural Park covers 962 sq km. Among this area are South Islet and Bird Islet, just two of Southeast Asia's few remaining safe breeding grounds for seabirds. Here you can find brown and red-footed boobies, and these tiny islets are the only known breeding grounds for an endemic subspecies of the elegant black noddy.

As we approach Bird Islet, we can see dozens of sea turtles fleeing our bow like small fairies in the glittering water; while overhead booby birds with glittering turquoise breasts caused by reflection from the beautiful sea beneath soar higher and higher. This amazing place is normally closed to humans, but we're volunteers on a Tubbataha

seabird monitoring team headed by Danish consultant Arne Jensen.

A booby chick hatches in front of our eyes. Fluffy young birds stare down at us from wrinkled branches. I'm in the water with my housed camera, and I walk slowly toward a small group of boobies on a branch overhanging the glistening sea. They look down at me with eyes that will forever be burnt in my memory. I'm so close I could pet them, and they are so tame from years of minimal human interaction that they probably wouldn't shy away.

I wish more people could experience moments like these; not much attention is given to seabirds in this part of the world. Fishermen and anglers claim there are plenty out at sea, but Arne says something that makes me think deeper. "These seabirds may live 25 to 30 years," he says. "That means we'll see them over the ocean for many years to come – but one day they die of old age. With no breeding grounds it's the beginning of the end."

Even though the islets are shrinking and trees are dying from an overload of guano, the Tubbataha park gives hope. Hope in the form of habitat management. Management sorely needed if the seabirds and fish in this unique ecological area can continue to thrive.

LONG. HARD STRUGGLE

The Tubbataha reefs have traditionally been under the jurisdiction of the Cagayancillo islanders, who live almost 80 km to the northeast. Theirs was always a subsistence living, and it wasn't until the 1980s that the Cagayanons started to use the reef more intensively.

Tubbataha was always an area with a great abundance of everything: turtles, birds, eggs from both, and fish everywhere. In the 1960s, the villagers made the crossing in traditional boats, *pangkos*, and these excursions could take up to a month. Later, with engines strapped to the stern of their wooden outriggers, trips became shorter and more frequent.

Seaweed production was introduced to the Cagayancillo islands in the mid-'80s. The islanders embraced the idea, but new fishermen from the Visayas region came to Tubbataha. These fishermen introduced destructive fishing methods that were the sole reason their own fishing grounds had become barren. Dynamite and cyanide became common fishing methods in Tubbataha.

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The biggest threat however came in 1988, when the Cebu-based seaweed company, Shemberg, started a pilot project at North Islet. At first it looked like a small project, but soon it was apparent their plans were bigger: The idea was to have 24,000 people living on the reef, farming a product – seaweed – that would be in direct competition for much of the resources the reefs survived on.

Fortunately the conservation lobby was strong, and pushed for the removal of the seaweed farm. The political power struggle took two years before local residents and soldiers reduced Shemberg's buildings to fiery flames.

Tubbataha was safe, but it was years before the Cagayanons realised that a no-take zone would benefit everybody and an effective management scheme was put in place. And then it all happened swiftly. The World Wide Fund for Nature (WWF) came to the area in 1996. The ranger station was built in 1999. A management board was put together the same year, and the TMO opened in 2001. This was the beginning of a brighter future for Tubbataha.

DIVING IN TUBBATAHA

Haunted by typhoons and heavy storms, the Tubbataha Sea can be very rough. In an odd guirk, the diving season is one of the shortest in the world: open only from March through June. But the divers who make this long journey are entering an absolutely unique environment.

On the way out to a dive we spot a fin, and then a mackerellike pattern glittering beneath the water. A tiger shark returns from hunting turtles, passing over the shallow reef. The tiger shark can easily bite through the carapace of a sea turtle, and we don't feel like joining it in the water, so content ourselves with following it from the relative safety of our tender. At the reef edge the shark disappears into the deep blue. Only now can we make ourselves ready for the dive, and jump in.

The beautiful coral bears some unseemly scars: We see a few "trails" – obviously from anchor chains thrown haphazardly into the water – plough straight lines through the remarkably healthy hard corals. There is some evidence of dynamite fishing – patches here and there that look as if a bomb has blasted a hole in the middle of an otherwise intact area. The 1998 El Nino-Southern Oscillation (ENSO) event even took its own little toll on the corals of Tubbataha, but by 2004 the reefs had already recovered. Coral cover now exceeds the pre-ENSO years. This is a very resilient reef, and the best news is that damage on corals today is no longer man-made.

In the crystal-clear water we see sharks, turtles, manta rays, and big Napoleon wrasse – maybe some of those released by the rangers in early 2007 – are present on every dive. We even marvel at huge adult giant trevally and large, menacing barracuda. There are lots of big fish, an indicator that Tubbataha is getting along just fine.

In fact, surveys show that fish biomass doubled in Tubbataha from 2004 to 2005. And it's important to emphasise this doesn't just mean more fish, but more bigger fish. Mature fish that can reproduce year after year, ensuring the life cycle isn't broken, and that the reefs and their inhabitants will continue to thrive.

It's safe to say that Tubbataha's no-take zone is feeding the Sulu Sea with fish. Just what everybody had dreamed would happen.

SHARING COST AND BENEFIT

"I remember how people at the university told us that such a result was impossible within such a short period," said my colleague at the WWF Tubbataha project, Marivel. "But in the end they had to admit that this was surely an amazing result." And it all happened because of some incredible park management.

The management of Tubbataha is 80 percent enforcement, and without an effective ranger station, is not going to work. But Marivel is convinced success in Tubbataha is also a result of a strategy that allows for costs and benefits to be shared between all stakeholders.

The Cagavanons needed to get something in return for giving up this rich fishing ground. Today a large part of their income is derived directly from the park, and socio-economic surveys have shown the islanders have used the money wisely, in projects like a farm-to-market road, a micro-credit programme, a marketing fund for seaweed, as well as setting aside dollars for better education and healthcare. In addition, the Cagayanons believe so much in the notake approach that they have adopted it in their own nearby waters.

A no-take zone can seem like an old fashion and stiff approach. but as the Tubbataha case shows it has created a win-win situation. It might be the only way we can give the marine environment a chance to show its tremendous will to survive, while giving us untold stories and experiences that we'll treasure for many years. so



above: Tubbataha's marine environment isn't all that's thriving as a result of the area's marine park status; the birds are living large as well

opposite page: A massive tiger shark (Galeocerdo cuvier) cruises the shallows looking for its prey, mainly turtles and rays