



Adventures in Saving the Oceans

In 1997, a network of volunteer scuba divers confirmed that the health of coral reefs around the world was declining at an alarming rate. Today, other volunteers are restoring those same reefs. It's all part of a global movement to conserve the oceans—and you, too, can participate. To help you get started, *Afar* interviewed Narriman S. Jiddawi, a renowned marine biologist from Zanzibar, to learn about successful stewardship strategies. Then we found seven volunteer trips that put these strategies to work in varied ways, from saving sea horses in Cambodia to teaching South African kids about conservation. Finally, we talked to travelers who experienced these adventures firsthand. Dive in.

AN EXPERT'S OPINION

NAME: Narriman S. Jiddawi

LOCATION: Zanzibar, Tanzania

PROFESSION: Marine biologist, senior lecturer at the University of Dar es Salaam's Institute of Marine Sciences, 2006 Pew Marine Conservation Fellow

SPECIALTY: Marine conservation projects that also improve the economic well-being of coastal communities

PROJECTS: Worked with the United States Agency for International Development to create a sustainable program for farming pearls and making shell jewelry; helped establish the Kizimkazi Dolphin Tourism Association; collected information on the economic value of Zanzibar's marine ecosystems to aid government policy making.

WHAT WORKS: "The marine ecosystem is interlinked. You cannot say that you are protecting the coral reefs without protecting the sea grass and without protecting the mangroves. We have to manage all of them in an integrated manner. But if marine conservation is to be sustainable, it has to be profitable to the community. Listen to the local people, work hand in hand with them, and then fulfill what you have promised."

HOW TRAVELERS CAN HELP: "Volunteer to study the reefs, make brochures that build awareness, monitor turtle nesting sites, participate in ecotourism activities, and be willing to pay a fee to visit conservation areas."



BENEATH THE SURFACE: The ocean covers 71 percent of the planet, but 95 percent of the underwater world remains unexplored. The blue whale, the largest animal on Earth, has a heart the size of a Volkswagen Beetle. Some Pacific loggerhead turtles migrate between Japan and Mexico—about 7,500 miles each way.

TRIPS WORTH TAKING

CAMBODIA

MARINE CONSERVATION CAMBODIA, 855/(0) 92-749-772, WWW.MARINECONSERVATIONCAMBODIA.ORG

At least seven endangered species of sea horses populate the waters off Cambodia's southern coast. Today, damaging fishing methods and pollution threaten their survival. Marine Conservation Cambodia works with the country's fisheries administration to save the region's sea horses, reefs, and mangroves, while promoting sustainable fishing practices.

HOW YOU HELP: Map the reefs, then help clean and regenerate them (training provided); take photos of sea life for a marine species list; meet with local



communities to share ideas about conservation, environmentally friendly fishing, and ecotourism.

HIGHLIGHTS: Bunk in a bungalow on the coral-ringed island of Koh Rong Samleom. Explore mangroves inhabited by hairy-nosed otters, milky storks, and long-tailed macaques. Swim with a herd of sea horses.

PRICE: Two-week trip minimum, from \$1,050, includes meals and lodging.

COSTA RICA

PRETOMA, 506/2241-52-27, PRETOMA.ORG

Every year, up to 350 sea turtles crawl ashore to nest on the beaches near Punta Banco, a small village on Costa Rica's Pacific coast. Since 1996, the Costa Rican nonprofit Pretoma has worked with volunteers and Punta Banco residents to protect hundreds of thousands of sea turtle hatchlings, reducing poaching rates by 80 percent.

HOW YOU HELP: From July to December, patrol beaches at night for nesting turtles, tag them, collect their eggs, and transport the eggs to a protected hatchery; shepherd the newborn turtles to the sea.

HIGHLIGHTS: Watch sea turtle hatchlings emerge from their nests. Live with a local family. Hike through the jungle to natural pools and a waterfall.

PRICE: One-week trip minimum, from \$330, includes meals and lodging.

A Sea Turtle's Midwife

Diane Diaz Goebes / Pretoma volunteer / Costa Rica

“It’s one in the morning. The sky is phenomenal. Lucy [another volunteer] and I go out on the beach with José, a local monitor. At first we don’t see any turtles. Then José says, ‘There’s a turtle!’ She’s huge, maybe three feet long. We turn off our lights and wait until she finds a nesting spot. With her hind limbs, she digs a deep hole. The sand flies! She squats, and the eggs start coming out. We come right up to her, because once she starts laying—I guess it’s like any kind of birth—she can’t stop. As the eggs are coming out, Lucy and I catch them and put them in a bag to take to the hatchery. We just keep saying, ‘Oh my God! Oh my God!’ Meanwhile, José looks at her front flippers to see if she’s already been tagged. She hasn’t, so he pierces her flipper and puts on a number tag. We write down her size and note her markings. Then we back off, and the turtle covers the empty hole. We watch her crawl slowly back to the water. I feel connected with something so ancient—something that’s been going on for millennia.”



FIJI

BLUE VENTURES, 44/(0) 20-3176-0548, BLUEVENTURES.ORG

Blue Ventures won an award from the United Nations for its marine conservation program in Madagascar. Now the U.K.-based nonprofit is working with Fijian landowners, the University of the South Pacific, local organizations, and the Fiji fisheries department to plan for the sustainable use and protection of the coral reefs around the island of Leleuvia, which has some of the most biologically diverse reefs in the world.

HOW YOU HELP: After training, gather data about the area’s reefs to help local residents make informed decisions about their marine resources; work with the community to set up ecotourism projects; talk to local schoolkids about practical ways to care for the environment.

HIGHLIGHTS: Dive with hawksbill and green turtles as well as rays, reef sharks, and moray eels. Sleep in a traditional thatched hut on the beach. Drink kava from a coconut shell during a *sevusevu* ceremony.

PRICE: Six-week trip minimum, from \$3,523, includes meals and lodging.

GREECE

TETHYS RESEARCH INSTITUTE, 39/02-7200-1947, TETHYS.ORG

Around the Grecian island of Kalamos, the short-beaked common dolphin population declined from about 150 animals in 1995 to 15 in 2007, according to the Tethys Research Institute, a nonprofit that has been studying whales and dolphins for more than 20 years. In the nearby Gulf of Corinth, one of the last refuges in the Mediterranean Sea for short-beaks, Tethys aims to avert a similar decline by identifying threats and offering scientific support to conservation efforts.

HOW YOU HELP: Record dolphin behavior and ecology on daily boat trips; photograph dolphins’ dorsal fins to track individual animals; raise awareness in the community through “Dolphin Days”





and meetings with the local fishermen. **HIGHLIGHTS:** Witness the acrobatic leaps of wild dolphins. Relax at a taverna in the village of Galaxidi, the program's home base. Visit the ruins of Delphi, revered in ancient Greece as the center of the universe. **PRICE:** One-week trip only, from \$831, includes meals and lodging.

KENYA

EAST AFRICAN WHALE SHARK TRUST, 254/720-293-156, GIANTSHARKS.ORG

Whale sharks, the world's largest fish, can weigh 20 tons and grow to 60 feet. But it takes only a four-inch gap in a nylon fishing net to entangle a whale shark's fin, which can lead to its death. In the southern Kenya resort town of Diani Beach, the East African Whale Shark Trust is working to phase out the use of these nets in favor of safer fishing methods, to educate residents and tourists about the sharks, and to build an international whale shark database. **HOW YOU HELP:** Make presentations in schools and hotels about the cause; create crafts with turtle-shell designs to raise money for shark-friendly (and sea turtle-friendly) fishing nets; during peak whale shark season (February to March), help researchers tag and gather information on sharks.

HIGHLIGHTS: Spot elephants and antelope in the nearby Shimba Hills National Reserve. Live a few steps from Diani's white sand beach. Snorkel beside a shark larger than a school bus.

PRICE: Four-week trip minimum, from \$750, includes lodging.



SOUTH AFRICA

OCEAN RESEARCH CONSERVATION AFRICA (ORCA) FOUNDATION, 277/(O) 82-782-4459, ORCAFOUNDATION.COM

The town of Plettenberg Bay, South Africa, is famous for whale-watching excursions where visitors see migrating humpback, southern right, and Bryde's

Kava, Cannibals, and the Oscars

Jim McNish / Blue Ventures volunteer / Fiji

“Howard, the expedition manager, tells us that we are going to meet a Fijian chief, Ratu Epenisa Cakobau, who is in line to become the next head of all of Fiji's tribes. It's like going to England and being invited to tea with the queen. 🏰 We arrive on the island of Bau, where Ratu Epenisa lives, and the Fijian media are all there. Ratu Epenisa's right-hand man welcomes Blue Ventures in Fijian, and each person is given a coconut shell filled with kava [a traditional, mildly narcotic drink]. We clap our hands and say ‘*Bula!*’ as we accept the bowl. When we are introduced to Ratu Epenisa, we crawl toward him on hands and knees. He is very gracious. 🏰 After the ceremony, Ratu Epenisa gives us a tour of the island. He shows us an immense tree sitting in the village green that dates back to the island's cannibal past. ‘This used to be our larder,’ he says, ‘where we would take our enemies, chop their heads off, and hang them by their feet.’ 🏰 Later, Ratu Epenisa invites us back to his house. Inside he has a harpoon strung up on the wall next to his flat-screen TV. There's a whale's tooth sitting on a table and an exercise bike on the patio—all these incongruous things next to each other. Ratu Epenisa says, ‘Come on in, help yourself to tea. The Oscars are on the telly. Watch them if you like.’ Just then Jessica Biel is walking down the red carpet in L.A. in this glamorous dress, and I'm standing there chatting with the future high chief of Fiji. It just does not compute at all.”

whales; three species of dolphins; and great white sharks. The ORCA Foundation, a private initiative founded by the ecotourism company Ocean Blue Adventures, seeks to protect the health and habitat of these animals while reducing poverty in the region.

HOW YOU HELP: Contribute to studies on tide pools, river water, sea horses, and fish populations; teach local children about marine conservation on weekly preschool visits and beach cleanups; join commercial boat trips to collect data on whales and dolphins.

HIGHLIGHTS: See a southern right whale breach in the bay. Tour a Cape fur seal colony with kids from a local township. Hike in Robberg Nature Reserve, home to Cape clawless otters and blue duiker antelope.

PRICE: Two-week trip minimum, from \$1,000, includes meals and lodging.



SURINAME

OCEANIC SOCIETY, 800-326-7491, OCEANICSOCIETY.ORG

For 40 years the Oceanic Society, based in San Francisco, has combined scientific research with support for local communities to establish protected natural areas. In Suriname, on South America's northeast coast, the society works in cooperation with Amerindian communities and the Suriname Foundation for Nature Preservation to research and monitor endangered green, leatherback, and olive ridley turtles at the Galibi Nature Reserve.

HOW YOU HELP: Patrol beaches with a local warden and field researcher to gather biological information about nesting turtles; transport turtle eggs to areas safe from tides and beach erosion; escort newly hatched turtles to the sea.

HIGHLIGHTS: Learn about Amerindian cultural traditions at a village on the Marowijne River. Bird-watch for black skimmers and scarlet ibis. Measure a live leatherback turtle, which can reach eight feet in length.

PRICE: Nine-day trip only, from \$2,950, includes meals, lodging, and airfare from Miami. **A**

WHALE SHARK: TURGEN FREUND/NATURE PICTURE LIBRARY