

Providential outcome

A winning combination of isolation, local involvement and a broad ecological remit are making the management of the seas around Colombia's San Andrés islands a model for other conservationists, reports Mark Schrope.

The locals claim that the waters around the picture-postcard Caribbean island of Old Providence come in seven shades of blue; the surrounding corals come in a far greater range of hues and colours. Just a couple of kilometres offshore and 35 metres down, for instance, you can dive to Turtle Rock, a 12-metre megallith covered in red, yellow and neon green sponges with a 1.5-metre growth of bushy black coral at its peak. The seas of the San Andrés archipelago, a part of Colombia about 800 kilometres north west of the country's coast (and in fact much closer to Nicaragua) boast many fine reefs, impressive for both their quantity — Old Providence has the second largest barrier reef in the Americas — and their quality. The archipelago's reefs, although not pristine, are some of the healthiest in the Caribbean. And the intriguing mixture of autonomy and local representation that forms the basis of their management may be able to keep them that way.

Valuable lessons

In 2000 the San Andrés archipelago — Old Providence (also known by its Spanish name, Providencia), the more heavily populated San Andrés and an assortment of other islands, rocks and reefs — became the centrepiece of Colombia's Seaflower Biosphere Reserve, named after the ship that a group of Puritans used to reach the islands and settle there in 1631. The reserve covers 300,000 square kilometres — a whopping 10% of the Caribbean Sea. In 2005, a core region of 65,000 square kilometres was designated a Marine Protected Area (MPA), with associated restrictions on fishing, tourism and the like.

Marine ecologists widely agree that a global system of such MPAs is the last hope for many reef systems and their associated fisheries, but the step between designating MPAs and making them truly effective, both ecologically and bureaucratically, has been notoriously challenging. Lessons learned in Colombia could eventually affect marine resources elsewhere in the Caribbean and beyond. "It seems like really exciting things are going on there," says John Parks of the US National Ocean Service, who has worked on establishing MPAs with groups around the globe. "The creative thinking that has gone into making this possible is something that other nations would very obviously benefit from tapping into, including the United States."

Two key factors in the MPAs' apparent success are a historical lack of strong marine regulations in the area and a significant amount of local autonomy. Following the adoption of its new constitution in 1991, in 1993 Colombia's legislature transferred most of the control of, and responsibility for, environmental resources to 33 so-called regional autonomous corporations. The Corporation for the Sustainable Development of the Archipelago of San Andrés, Old Providence and Santa Catalina, known as CORALINA, is responsible for environmental planning, management and research, with a hand in everything from training scuba divers in best practices for protecting the region's reefs to teaching school children the value of the region's resources.

Like many remote areas of Colombia, the archipelago suffers from endemic unemployment, so CORALINA is working to develop vocational programmes. Some, but not

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— Jack Sobel**

all these, are tailored to fishermen affected by conservation efforts. One focus is to promote the islands' reefs and underwater cliffs such as Turtle Rock as attractions for scuba divers and other ecotourists. Because development is restricted, the islands have no five-star resorts, and nor will they — the visitors CORALINA has in mind are interested in a purer remote-island experience, especially on Providence.

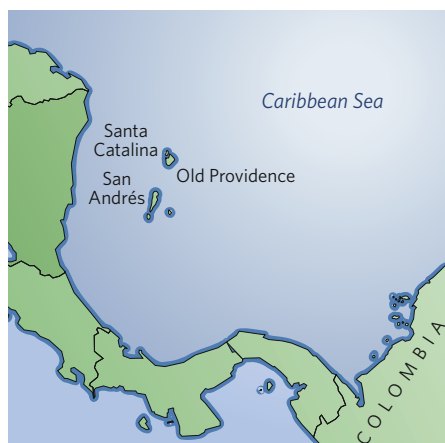
Local involvement

Unlike most environmental agencies, CORALINA can single-handedly develop and implement management plans that cover both the land and the surrounding seas, and the law gives it the muscle it needs to enforce its regulations. Between 1995 and 1997, the agency issued multiple warnings to two hotels on San Andrés, which with 60,000 inhabitants is by far the most populous island in the archipelago. The hotels were failing to comply with new sewage-treatment regulations CORALINA had imposed. When its warnings were ignored, CORALINA shut the hotels for two months. Not surprisingly, the hotels backed down. More surprisingly, perhaps, they were subsequently converted from beaten opponents to willing fellow travellers. "Today one of these hotels is part of our environmental stars programme," says Elizabeth Taylor, CORALINA's executive director. "People have been really changing."

Observers say that one of the most essential elements of the CORALINA model is the mandated involvement of local people. This provides the sort of accountability that avoids regulations and restraints being easily dismissed as the impositions of outsiders. Taylor's position is elected locally, and the agency is overseen not by a government official, but by a board of directors that has to include elected members from local businesses as well as representatives from the national and local governments. At least 3 of the 14 board members have to be from the islands' native population — descendants of planters and slaves from other Caribbean islands — which makes up a significant minority on San Andrés and an overwhelming majority on the much less populated Old Providence. Each board member's vote has the same weight.

As well as playing a specific role in governing CORALINA, locals have been heavily involved in the process of tailoring regulations to specific places. Whereas some environmental measures — such as a ban on fishing with nets — apply to the whole of the biosphere reserve, others, such as measures needed to protect an important conch habitat, need to be more specific. These more restricted areas are parts of the MPA set up in 2005, which includes extensive no-fishing zones and even a no-access zone accessible only for research and monitoring. "They have managed to designate a fairly significant portion of that large archipelago a no-take status, which we think is very important," says Jack Sobel, with the Washington DC-based Ocean Conservancy and a member of CORALINA's international advisory committee.

To delineate the reserve's various restricted zones, CORALINA sponsored hundreds of workshops, with various stakeholders mapping out what they knew about the best and most critical resources, and saying which areas they wanted to see protected. Later work included scientific surveys. Using a geographical information system to manage the various inputs, CORALINA proposed a variety of



potential zoning schemes, which were further altered in consultation with locals. Hundreds of stakeholders signed on to the scheme before official enactment by CORALINA, and many locals have embraced the results. According to a survey commissioned by CORALINA, 96% of fishermen say they believe that the MPA will benefit them. Dairo Casanova, owner of a snorkelling and ecotourism centre on San Andrés, talks enthusiastically about regulations that blocked spearfishing on some reefs that he depends on for snorkeling tours, turning the activity into an offense that can get its perpetrators a weekend in jail.

The support is not universal. Some native islanders have charged that the national government is manipulating CORALINA to prevent proper native representation on the board. But overall, says Taylor, "I think today we can say we have a lot of support from the local community, especially in San Andrés. The people in Old Providence still have some resistance, but not the majority."

Giovanna Peñaloza, who manages CORALINA's Old Providence office, says the fishermen there are not concerned so much about closed areas per se, but rather with enforcement. Foreign fishermen, they say, either don't know which areas are closed or don't care. CORALINA recognizes that the ultimate long-term success of the reserve and the MPA will require a number of changes — especially stepping up enforcement, which is currently managed by Colombia's agricultural ministry. To that end, the group is now finishing a proposal for funds from the Inter-American Development Bank that would enable major improvements to the system.

If the funds come through, the group would be able to purchase new boats for enforcement and monitoring work, set up buoy lines around protected zones and establish dedicated MPA offices on the islands instead of handling management out of CORALINA's limited existing facilities.

"So many MPAs in the Caribbean and elsewhere in the developing world have been put in place and end up being paper parks," says Sobel, "I think CORALINA is not likely to repeat those mistakes. It's a very talented group of people, and with the amount of planning and outreach they've done, I think they will be effective." Parks says that as CORALINA expands its efforts, he hopes recognition of their work will also expand. "We need these stories to be told. We need people to understand that we can do this, and that if we do it the right way, our children will have that future."

Mark Schroppe is a Florida-based freelance writer.

Elizabeth Taylor (left), Giovanna Peñaloza and Felipe Cabeza at CORALINA's Old Providence office.



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