



Netherlands Antilles Coral Reef Initiative



MPAs

An underwater photograph showing a diver swimming through a large school of small fish. The water is clear and blue, and the bottom is covered in coral and other marine life.

- Four islands have MPAs including all coastal waters, managed by NGOs, with user fees in place
- Curaçao has MPA for 12% of leeward coast, but no user fees and lack of management

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What is NACRI:

- Established in 2000
- Consists of:
 - MPA management NGO's
 - Dive operators
 - Grassroots groups
 - Tourism organizations
 - Island government agencies
 - (fishermen organizations)
 - Central government, Department of Environment (MINA)
- Member of the ICRI (Int. Coral Reef Initiative)

Priorities

- Coral reef monitoring
- Increased public awareness
- Sustainable fisheries
- Support for island MPAs
- Improved legislation
- strengthening communication and cooperation

An underwater photograph showing several divers in a coral reef environment. The divers are wearing scuba gear, including masks, regulators, and fins. They are positioned around a large, diverse coral reef structure. The water is clear and blue, with sunlight filtering through from above. The coral reef is composed of various species, including branching corals and large, flat coral plates. The overall scene is vibrant and detailed, showcasing the beauty of a healthy coral reef ecosystem.

Coral Reef Monitoring

- funding by NFWF and UNEP to form NACRI monitoring node for GCRMN
 - Volunteer Reef Check groups trained on all islands
 - Coral ID training for AGRRA volunteers in Bonaire
 - Nutrient Monitoring started for Curaçao and Bonaire

Coral Reef Monitoring

An underwater photograph showing two divers in a blue ocean. One diver is in the foreground, holding a measuring tape against a coral reef. The reef is covered in various types of coral, including some with long, thin, vertical structures. Bubbles are visible around the divers, and the overall scene is dimly lit, typical of an underwater environment.

- **St. Lucia added to extended nutrient monitoring program**
- **Funded by WW2BW (via NMSF)**
- **Comparing low-level nutrient concentrations, N sources, and algae cover**

Status of the reefs

- Bonaire and Curacao, very little bleaching in 2005
- some *Diadema* recovery in Bonaire, less in Curaçao
- Average coral cover in Curaçao from ~60% down to ~30%, but still some sites with 70% cover
- *Acropora* with high genetic diversity
- Recruitment of corals is high

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Status of the reefs



- **Severe bleaching in windward islands ~ 80% of corals bleached**
- **Estimated 30% mortality**
- **Disease reported after bleaching**

Status of the reefs

- Saba Bank surveyed in January 2006
- High coral diversity
- Recovering from bleaching, but not much mortality
- Algal diversity considered to be some of the richest of the Caribbean
- Large Xestospongia sponges with little sign of bleaching or disease

Conclusions

- Reefs continue to deteriorate, but recruitment rate and genetic diversity of Bonaire and Curaçao reefs is hopeful
- Cooperation through NACRI has improved monitoring
- Recent establishment of Dutch Caribbean Nature Alliance has strengthened MPAs

Conclusions

- Regional cooperation has strengthened local cooperation
- Need for further strengthening of monitoring groups and MPAs to improve monitoring frequency
- Need to further strengthen regional cooperation through instruments such as the SPAW protocol and the CaMPAM network