

# SXM reefs not beyond saving, but action critical, says Marine Expert Goreau



Dr. Tom Goreau addresses EnviroWeek audience at Belair Community Center Monday.

BELAIR — St Maarten's coasts and coral reefs are not beyond saving and are in fact in much better condition than most other Caribbean islands, an expert in coastal development and particular reef management told an EnviroWeek audience Monday night.

But St Maarten's reefs are dying and only elimination of the vast amount of algae in the coastal waters could reverse this situation, said President of the Global Coral Reef Alliance Dr. Tom Goreau to a small but mixed crowd of government officials, environmentalists and concerned residents at the Belair Community Center.

"Slimy-weed" Algae is one of the many environmental hazards being blamed for killing coral reefs worldwide, though some other factors are unknown.

Dr. Goreau, who hails from Jamaica but has traveled the world with his alliance, warns that the island's water quality should be of great concern to residents and governments — noting that an indicator of this is algae-based discoloration.

"There is no country in the world with water quality standards that are ecologically sound," said Goreau, who heads Caribbean coral reef restoration project Biorock.

Starve the algae or risk losing the aragonite-based reefs, he warned, showing an eight-minute documentary on algae domination of a healthy reef in Indonesia to his audience. Nitrogen and phosphorous-rich chemicals running off into the sea are to blame for the recent proliferation of algae being seen throughout the

Caribbean and simultaneous death of healthy reefs.

Coral bleaching — the loss of pigment symbiotes due to increased ultraviolet (possibly solar) radiation and high light levels — and black band disease — caused by bacteria devouring the live corals — are two potential hazards to local coral reefs, Goreau said.

"You are lucky here that you do not have much industry," Dr. Goreau noted, saying that factory-filled places tend to have immense build-ups of algae due to phosphates and nitrates spilling into the coasts very often.

However, the absence of industry does not mean St Maarten/St Martin is safe from nutrients feeding algae, Dr. Goreau said. Manufactured chemicals — especially detergents and fertilizers — have a strong chance of seeping into the soil and causing excessive algae growth.

Other factors causing the death of algae, Dr. Goreau mentioned, included warming of the ocean surface and oil and other toxic pollutants. But, in the case of warmer sea temperatures, "that has more to do with climate change and we are busy ... with that."

Dr. Goreau suggested initiatives to maintain and revive coral reef populations on St Maarten like reducing pollutants in the ground and stopping coastal dumping, saying that it is not too late for the Friendly Island to become eco-friendly as well. "At least your waters are still blue; most of where I come from are green," Dr. Goreau said.

The professor has been working on the biorock replenishment project for

months, with results being seen near Little Bay. As part of EnviroWeek Sunday, Dr. Goreau told a group of environmentally conscious residents of the results of months of biorock work.

He was also on the panel of experts and industry professionals at Saturday's youth panel discussion launching the first ever EnviroWeek.

Coral reefs are important for coastal stability and are also effective in minimizing hurricane and wave damage to landmasses, and the biorock artificial reef serves to stimulate marine life and promote the revival of existing corals.