TOM GOREAU

Science & Environment

EXPERTISE

- Global Climate Change
- Coral reefs
- Ecosystem regeneration
- Greenhouse gas sources & sinks
- Indigenous Sea cultures
- Community-based management
- Carbon negative building material
- blue carbon sequestration
- Soil remineralization
- shore protection
- Island nations

Thomas J.F Goreau, President and founder of The Global Coral Reef Alliance, and Chief Scientist of Blue Regeneration, has dived for 65 years.on coral reefs across the Caribbean, Pacific, Indian Ocean, and South-East Asia, including most tropical island countries.

He has published more than 150 papers and written and edited books on coral reefs, scientific photography, marine ecosystem restoration, greenhouse gas sources and sinks, microbiology, soil fertility restoration, climate stabilization., and many other subjects. He is co-inventor of the HotSpot method for predicting coral bleaching from satellite data and of the Biorock method for regenerating marine ecosystems and eroding coastlines, and removing CO2 from the atmosphere to reverse global climate change.

He works with UN agencies, government environmental agencies, non-profit community-based environmental groups, divers, fishers, and subsistence coastal communities around the world to regenerate their coastal ecosystems, fisheries, beaches, and tourism under local management. He advises many non-profit organizations, environmental management groups, research groups, students, and companies world-wide.

In 1989, as Senior Scientific Affairs Officer for global climate change and biodiversity issues at the United Nations Centre for Science and Technology he helped draft the original version of the UN Climate Change Convention, and inserted language to make it scientifically sound that was removed by governments, causing systemic false-accounting of greenhouse gases that make the treaty unable to achieve its goals of preventing dangerous climate change. His work shows that coral reefs and low islands are the first and worst victims.

His work focuses on innovative science to greatly increase nutrient recycling, productivity, biodiversity, carbon storage, and ecosystem services of both marine and terrestrial ecosystems to reverse climate change before coral reefs are driven extinct from global warming.

SKILLS

Scientist

Author

Inventor

Teacher

EDUCATION

Jamaican primary and secondary schools, MIT (BSc Planetary Physics), Caltech (MSc Planetary Astronomy, Yale (Geology & Biology), Woods Hole Oceanographic Institution (Chemical Oceanography), Harvard (PhD, Biogeochemistry)

HEADQUARTERS

Cambridge, Massachusetts, USA