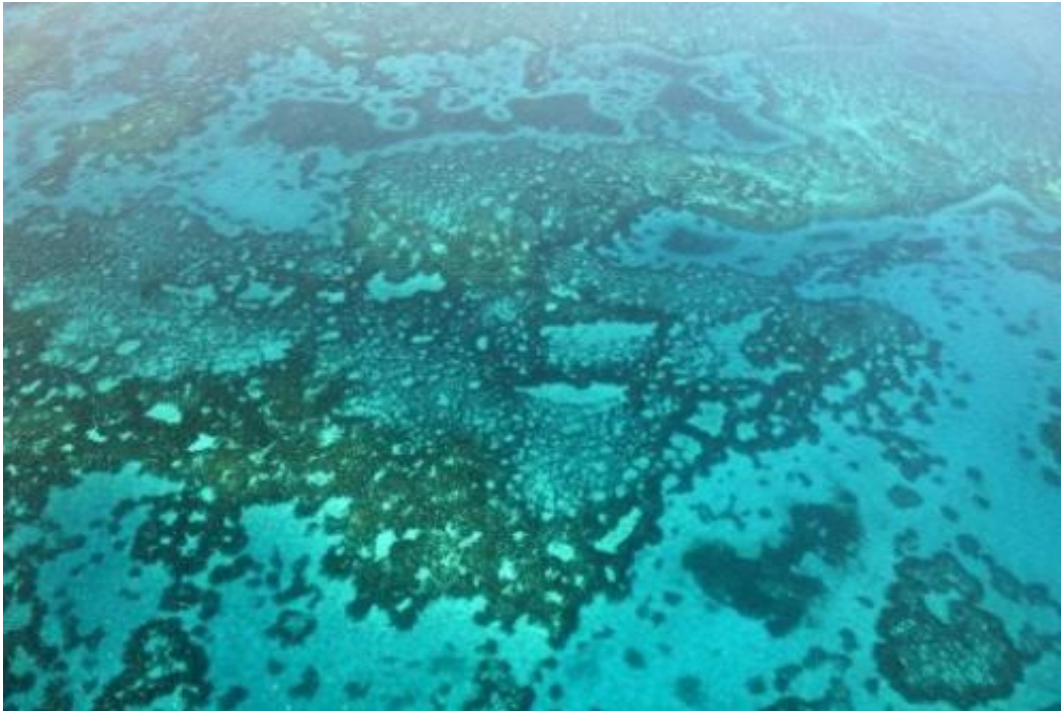


To save corals, save the forests, study says

June 4 2013



A coral reef near the 82nd Meridian is seen on November 30, 2012. Conservationists fighting to save coastal coral reefs should think first about combatting local deforestation rather than attacking the wider peril of global warming, suggests an unusual study published on Tuesday.

Conservationists fighting to save coastal coral reefs should think first about combatting local deforestation rather than attacking the wider peril of global warming, suggests an unusual study published on Tuesday.

Sediment washed downriver by tree-depleted land can cripple near-shore

corals, as it clouds the water and diminishes the light on which coral communities depend.

When the sediment sinks to the seabed, it smothers the corals, forcing them to increase energy expenditure to survive, boosting the risk of "bleaching" and die-out.

A team led by Joseph Maina of Macquarie University in Sydney, Australia, carried out a computer simulation of four river systems in Madagascar whose outflows have an impact on local [coral ecosystems](#).

By 2090, global warming will have a big effect on these watersheds, reducing rainfall and as a result diminishing the deposit of sediment into the sea, they found.

"However, these climate change-driven declines are outweighed by the impact of deforestation," says their paper.

Deforestation in Madagascar has boosted [river sediment](#) fivefold since human settlement expanded there, it calculates.

Sediment volumes could be reduced by between 19 and 68 percent if between 10 and 50 percent of natural forest is restored, it says.

Planting new forests "offers promise for sustainable environmental outcomes in the face of climate change in one of the world's most important [biodiversity hotspots](#)," it says.

Scientists say warmer seas, along with overfishing and habitat loss, are major perils for corals, on which hundreds of millions of people depend for their livelihoods.

A quarter of reef-building corals face extinction, according to the "Red

List" of threatened species compiled by International Union for Conservation of Nature (IUCN).

© 2013 AFP

Citation: To save corals, save the forests, study says (2013, June 4) retrieved 26 April 2024 from <https://phys.org/news/2013-06-corals-forests.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.