

Coral reefs in the Pacific and Indian oceans are disappearing faster than had previously been thought, a scientific study has shown.

Nearly 1,554 sq km (600 sq miles) of reef have disappeared each year since the 1960s - twice the speed at which rainforest is being lost. The corals are vanishing at a rate of 1% per year, a decline that has begun decades earlier than expected. Details of the survey appear in the journal Plos One.

Historically, coral cover, a measure of reef health hovered around 50%. Today, only about 2% of reefs in the region looked at by the study have coral cover close to this historical level.

John Bruno and Elizabeth Selig from the University of North Carolina - Chapel Hill, US, and colleagues, looked at reefs in a large area of ocean stretching from western Indonesia, in the Indian Ocean, to French Polynesia, in the Pacific. The Indo-Pacific region, comprising the Indian and Pacific oceans, contains 75% of the world's coral reefs.

The researchers analysed the results of some 6,000 surveys carried out on more than 2,600 reefs. The findings show that average coral cover declined from 40% in the early 1980s to about 20% by 2003.

Island impacts

One of the most surprising results was that there seemed to be little difference between reefs maintained by conservationists and those left unprotected. Dr Bruno and Ms Selig argue that the consistent pattern of decline across the study region adds to mounting evidence that coral loss is a global phenomenon. This is probably due to large-scale processes such as climate change, they say.

This is likely to have a major impact on many island communities, which rely on the reefs for fisheries and tourism.

"The actions of people in Iowa, for example, have a big effect on people in small islands and throughout this whole Indo-Pacific region. It affects their livelihoods dramatically," Dr Bruno told the BBC. "When corals died, there were some studies which showed how quickly the dive shops and the hotels closed down."

The UN says that a third of the world's coral reefs have already died. By 2030, that figure is predicted to be closer to 60%.



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