

USGS develops improved technique for coral reef monitoring

Coral reefs are being degraded on a global scale, and a better understanding of the factors that affect coral growth could tell us why. To this end, the U.S. Geological Survey (USGS) has pioneered a new weight-based method that allows for more accurate and precise measurements of coral growth.

At reefs along the Florida Keys, USGS scientists transplanted corals to fixed surfaces from which they could periodically be detached and weighed. Prior studies have relied on linear measurements of coral growth, which are inherently less reliable, since corals do not grow uniformly in all directions.

Research has suggested that effects from global climate change and changes in land use, including ocean acidification, increasing ocean temperatures, and water quality degradation, are implicated in coral population decline. However, linking these factors to coral decline in particular reef environments remains a challenge. By providing a practical and precise method of monitoring coral growth, this work by the USGS should enable improved understanding of the influences on coral reef health in the wild.
