Project Update: May 2011

In 2010, we measured coral cover and recruitment, macroalgal cover, and fish density at 14 sites along the Belizean Barrier Reef. We compared the benthic and fish parameters collected in 2010 to data collected at the same sites in 2009. Preliminary results indicate that herbivore abundance was higher in 2010 when compared to 2009. Coral cover was only slightly higher and macroalgal cover was only slightly lower in 2010 at four to six sites. More significant and broader changes in coral and macroalgal cover may be detected after further monitoring as one year of increased herbivore abundance may not have been sufficient to affect macroalgal and coral cover. Further monitoring is necessary to enhance the statistical power of our analysis, strengthen the finding that a regional fishing ban is successful in increasing herbivore abundance and to determine the effect of a regional fishing ban on restoring coral cover over time.

