Benefits of High Resolution Video Mosaic Technology

- Landscape scale view with sub millimeter resolution

- Allows for detailed benthic assessment including individual colony health information and the identification of small colonies directly from images (shown below on right)

- Percent cover and coral colony size metrics are attainable out of the water (using mosaics only)

- Mosaics provide high resolution permanent record of the state-of-the-reef at the time of surveys.

  Sub-millimeter resolution for entire area surveyed (over 200m² at site on the left.

- Repeat surveys are easily georeferenced for change detection analyses.

  At the site shown to the left mosaic surveys were used to track the effects of the 2005 Caribbean-wide mass bleaching event. Use of the mosaicing technology allowed scientists to track hundreds of colonies over time without traditional tagging methods that are time consuming and potentially harmful to reefs.

In the example above the large *Porites porites* colony (B) has shown significant recovery during the 2 year monitoring effort while the *Montastrea faveolata* colony (shown in C) shows continued partial mortality.