**Labrid-Scarid Surveys on the Long Term Reefs**

**Title:** Thalassoma Surveys on Long Term Reefs

**Overview**: Characterize size structure of *Thalassoma hardwicke* and other fish species dominant around the reefs. We ultimately hope to use the data on size structure and numbers of *Thalassoma* to infer settlement rates, growth rates and survival.

**General Procedure:** A single snorkeler approaches one of the 22 patch reefs (for size of reef, see LTR\_PhysicalChar files, each are ~ 1-8 m2 in aerial extent) swam around it and attempted to recognize and estimate the size of all the *Thalassoma* on the reef. Large adults that were clearly attracted by the arrival of the snorkeler were ignored. We also estimated the number and size of resident *Gomphosus* *varius*, *Pseudocheilinus* *lineatus* all around the reef. Counts of small recruits of labrids and scarids were combined, excluding those three species. We also counted and identified species that we considered potential predators that were within ~ 3 meters of the reef for each patch reef. In 2012 settler counts were not completed.

**Materials:**

Data slate with photographs of *Thalassoma* of different size classes to help with the visual estimates at each site.

**Solutions/Reagents** (if applicable): NA

**Procedure:** See above

**Calculations:**

Note: data were entered into excel and then restructured with a macro to create the final data set. Because of this data entry method there maybe two similar entries. (e.g., if there were two fish of species or type X that were the same size (Y), they would each be on the final data sheet as Fish X, Size Y, count: 1, instead of Fish X and Y size count: 2)

**Author:**

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