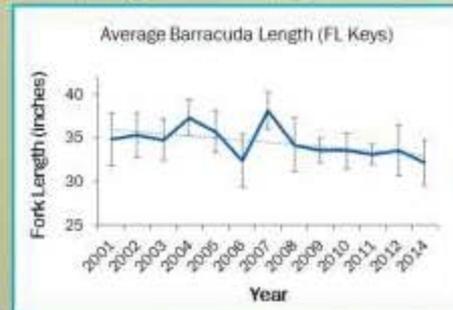
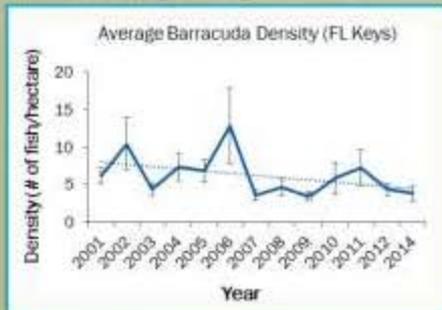


FWRI Research



- Reef Fish Visual Census (RVC)
 - A count of fish within a given area
 - Conducted on natural reefs
- Barracuda densities variable, with slight declining trend
- Average length of barracuda show slight declining trend



Reef fish visual census (RVC) surveys conducted by FWC's FWRI consist of an underwater survey method in which divers count all fish within a five-meter cylinder of the water column for a standardized period of time. Fish lengths are also estimated (within a 20% margin of error) during the surveys. This method allows researchers to compare trends in the prevalence and size of species encountered during the survey through time. FWRI conducts RVC surveys on natural reefs throughout the Florida Keys. The data summarized here were collected from 2001 to 2014.

While the RVC surveys did not detect a major decline in the abundance of barracuda over the sampled timeframe, the density of barracuda does exhibit a slight declining trend. A slight decreasing trend in the average length of barracuda was also observed.

If there has been a major decline in barracuda abundance in the Keys during recent years, the RVC surveys were not able to detect it. However, RVC surveys were not designed to assess the abundance of barracuda and are not ideally suited to this particular species because of their preference for non-reef habitats. The fact that barracuda are not as abundant on reefs as many of the other species captured by the survey, and are therefore observed less frequently and in fewer numbers, results in a greater amount of uncertainty around the calculations of abundance and length than we see in RVC data for other species, which makes it more difficult to detect and assess the observed trends. This uncertainty is greater in some of the early years of the survey shown on the graphs (prior to 2008) when fewer surveys were conducted. Thus, the lack of a strong trend in the recent RVC data may mean that the decline has not been substantial enough to be reflected in the survey results, or it may be a result of the unique behaviors of barracuda and their use of non-reef habitats. The presence of a downward trend in the average length of barracuda does suggest that fishing pressure may have reduced the abundance of larger fish.