Kelp Sampling

The purpose of kelp monitoring is to track the abundance and size of all *Macrocystis pyrifera* plants at Santa Cruz Island reef sites over time. Kelp sampling is performed by an observer swimming the length of the 40 m transect twice, once each on the onshore and offshore sides of the transect tape. The total sampling area is 80 m² (Figure 1). As the observer swims, he/she holds a 1m-long bar perpendicular to the transect tape and records data for all *M. pyrifera* encountered in the 1m wide area on both sides of the transect tape. Kelp data is recorded in four subsections for each transect, 0-20 m Inshore, 21-40 m Inshore, 0-20 m Offshore and 21-40 m Offshore (inshore and offshore relative to the island). Each plant with at least half of its holdfast located within 1 meter of the transect tape is counted. The number of fronds, measured 1 m above the holdfast, is recorded. Sub-adult plants that have a common holdfast are considered one entity.

Figure 1. Kelp sampling area years 2011-present.

