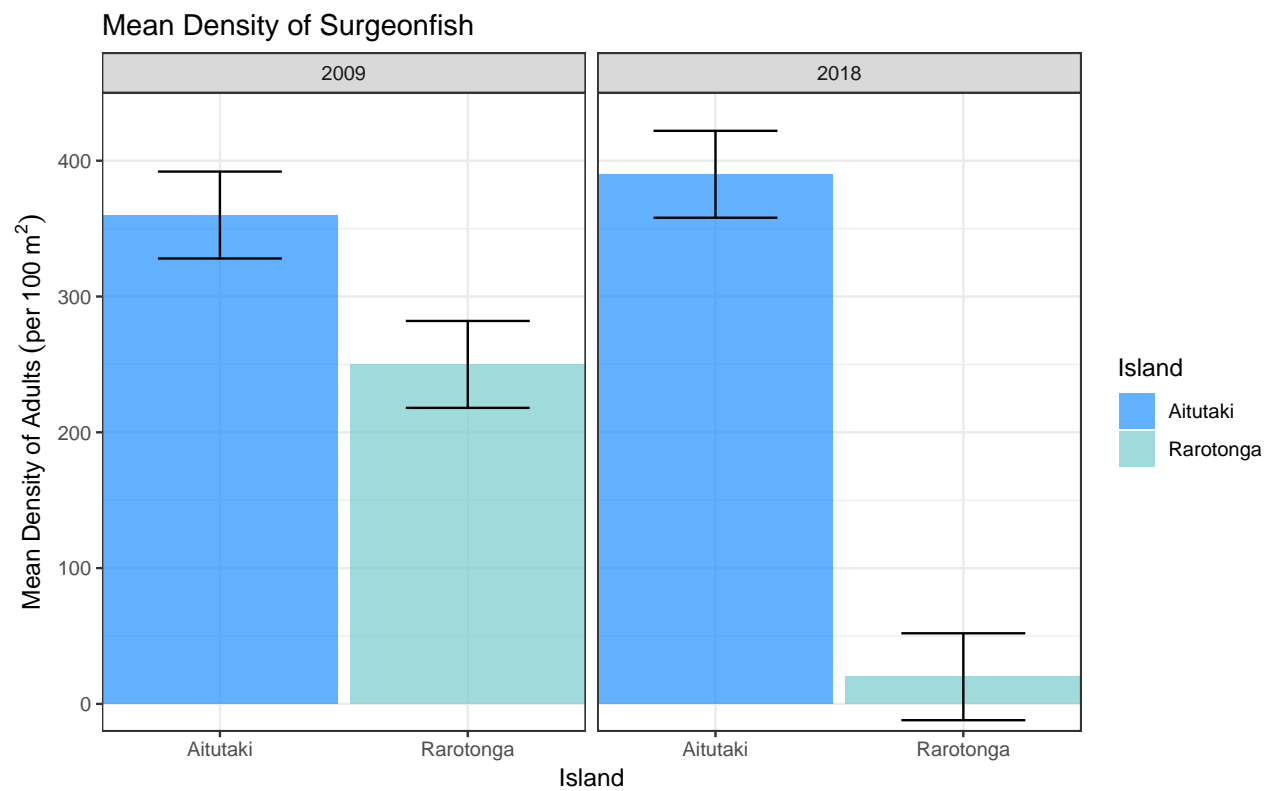


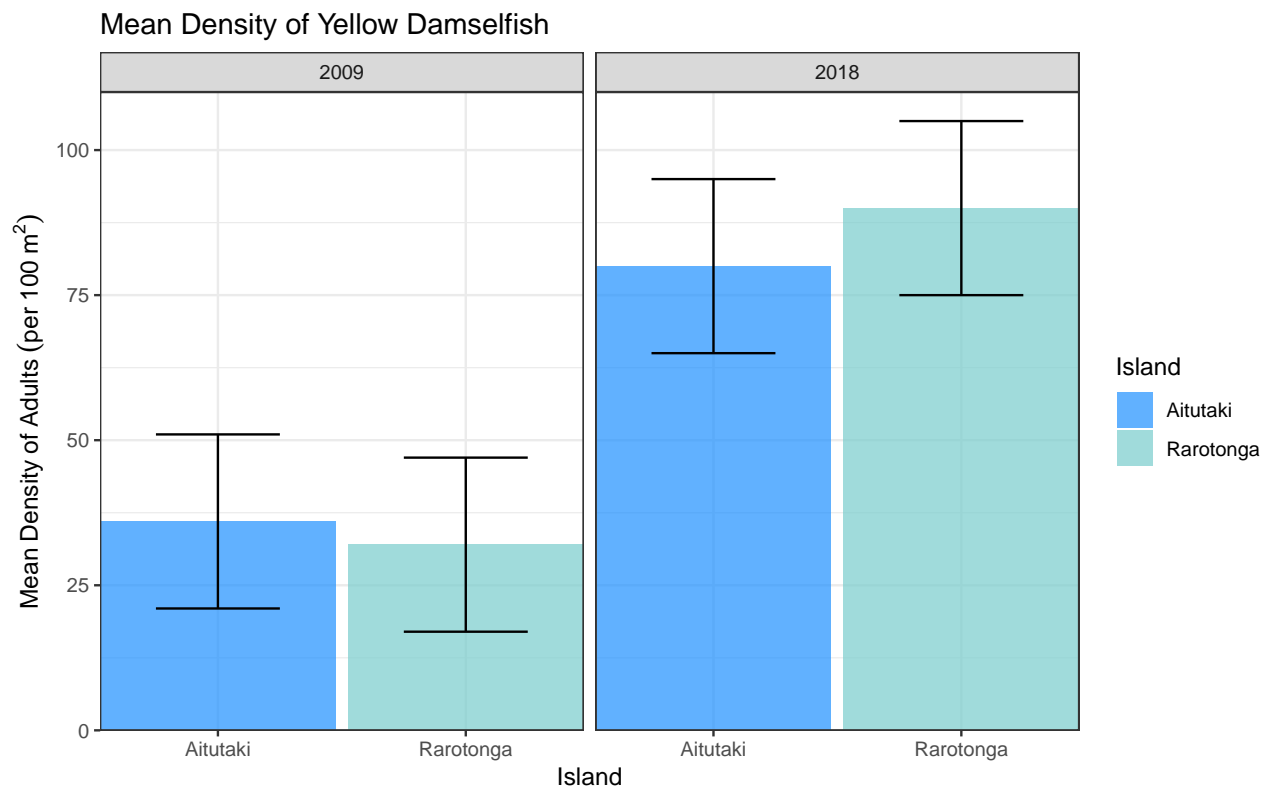
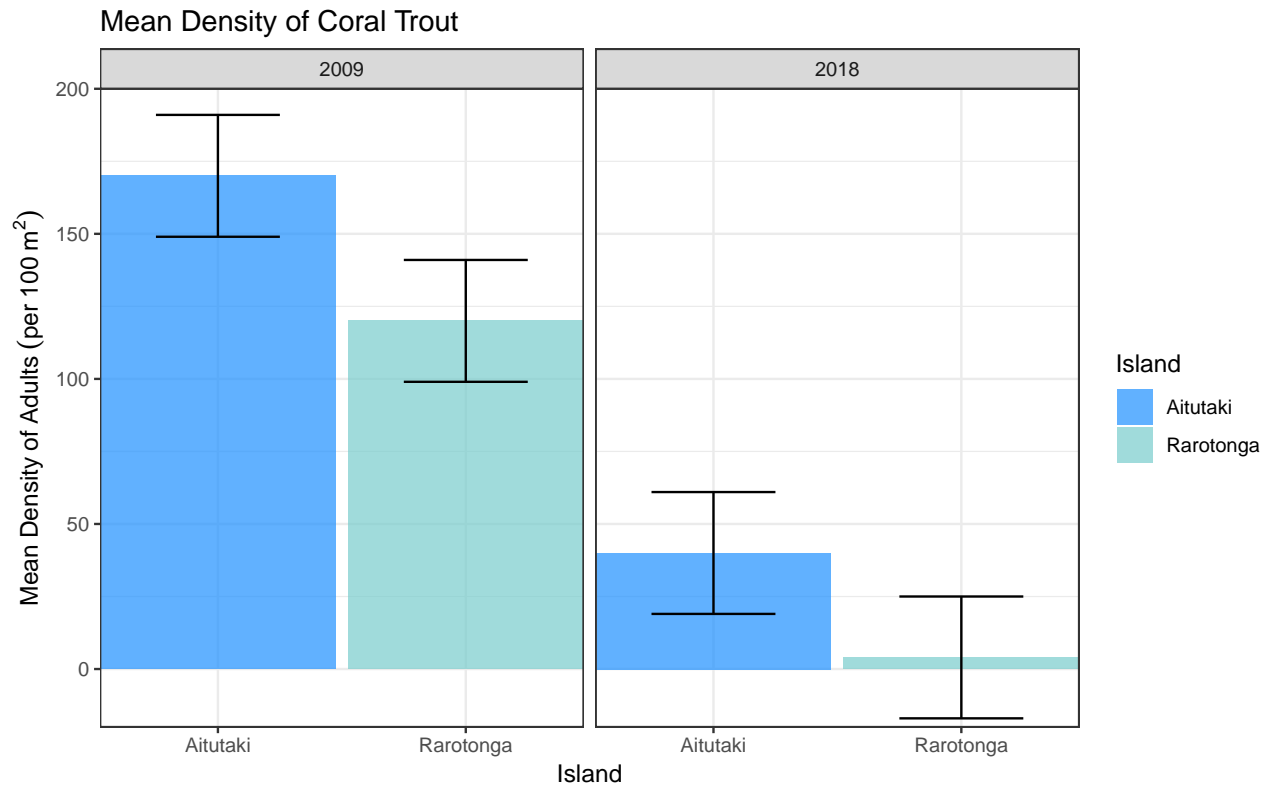
## Question 1

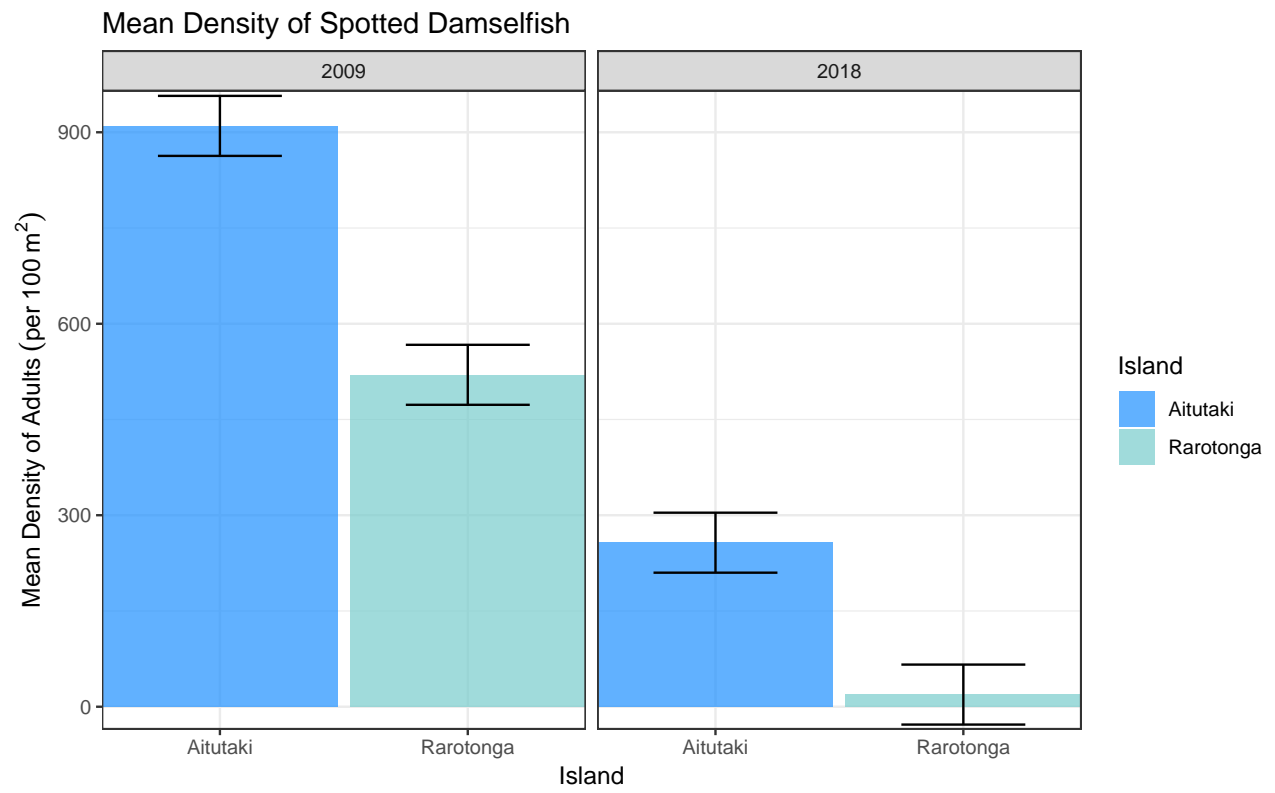
### Mean Adult Density Graphs

Tasks:

- Graph mean adult density for each species at each lagoon, separate by years





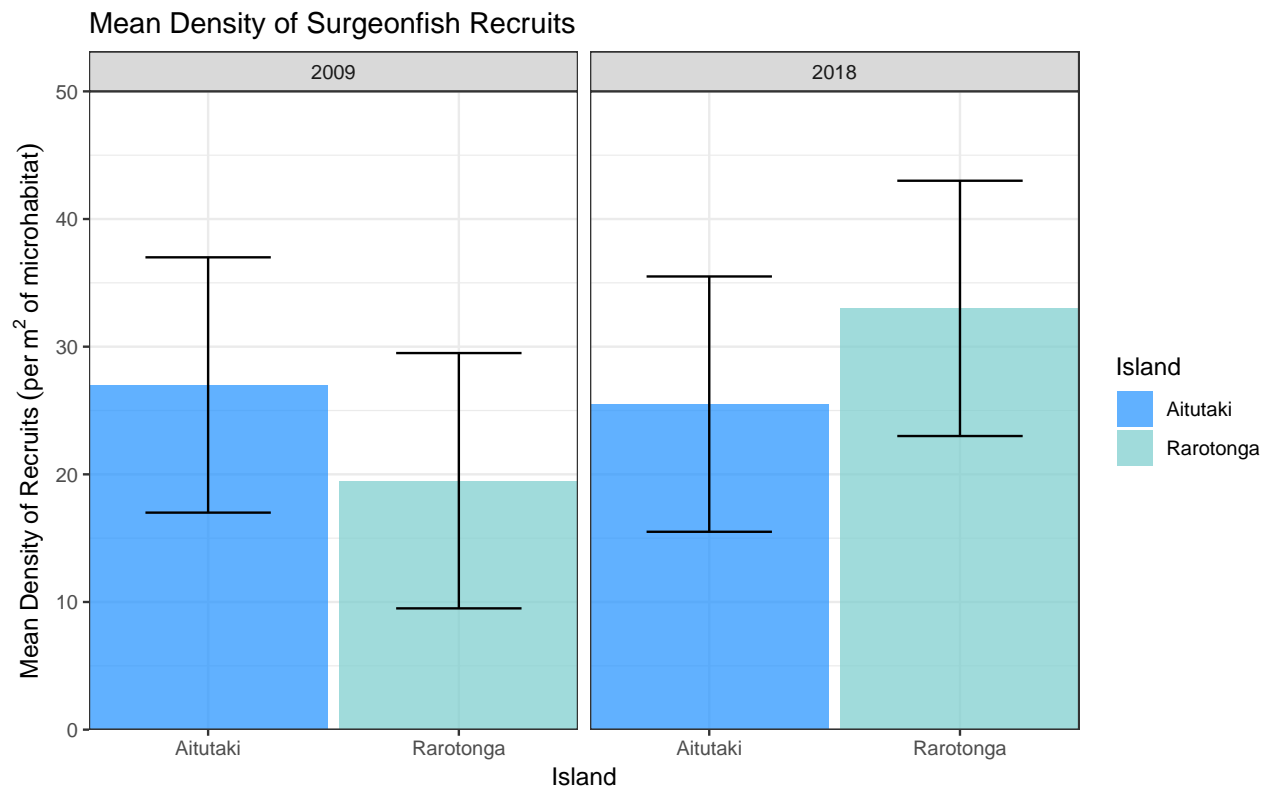


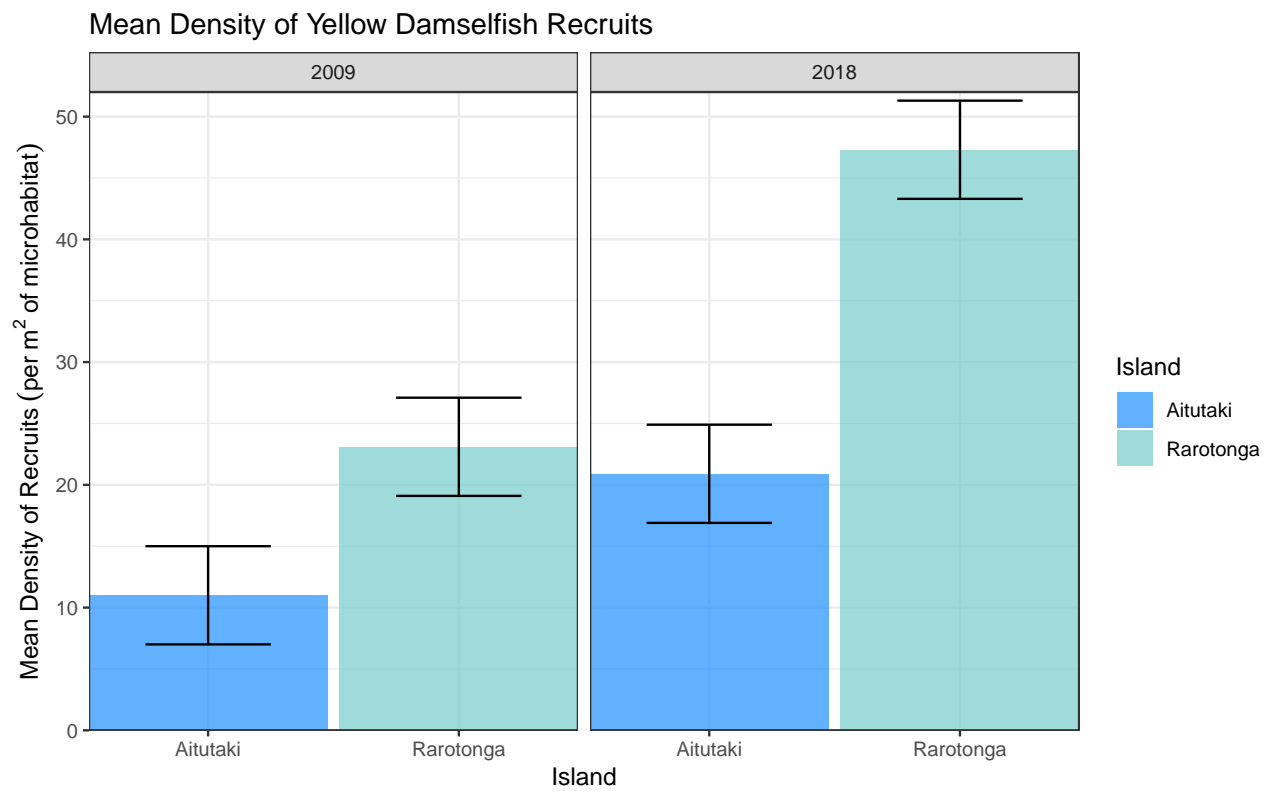
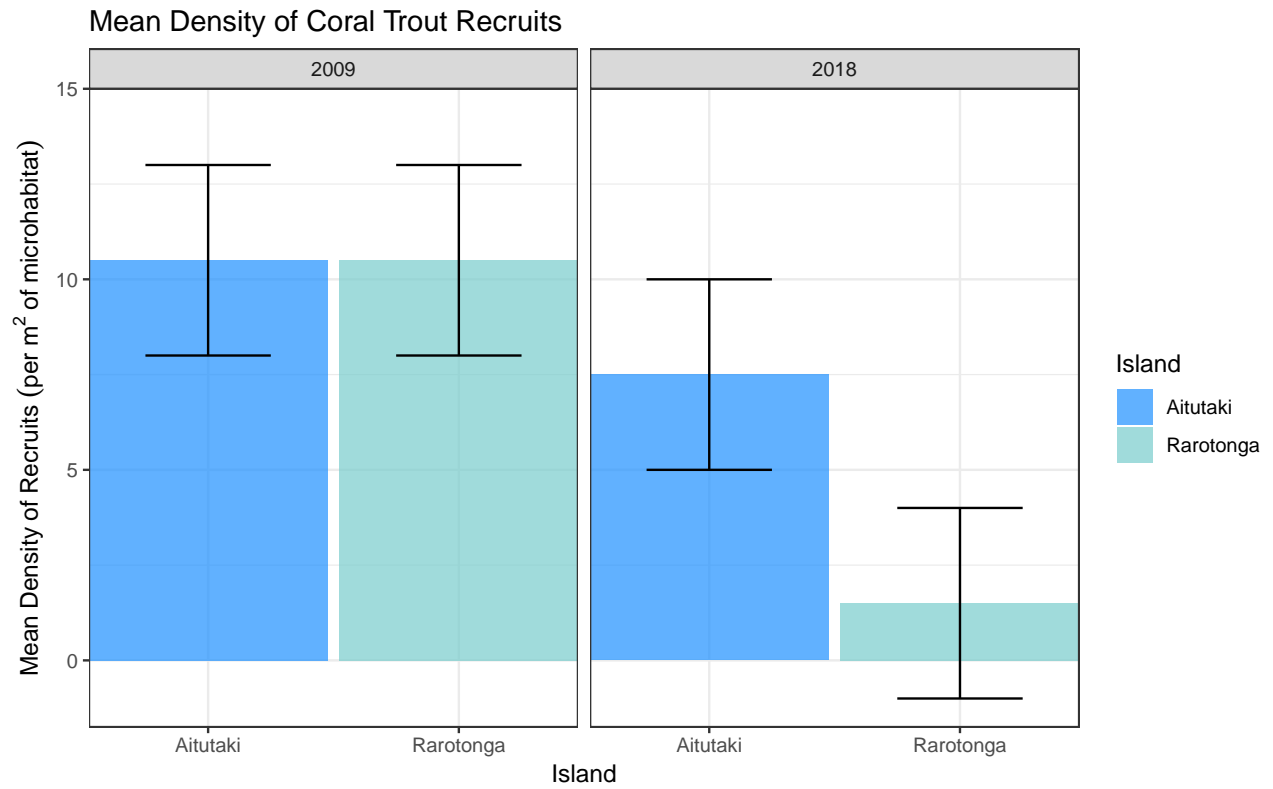
## Question 2

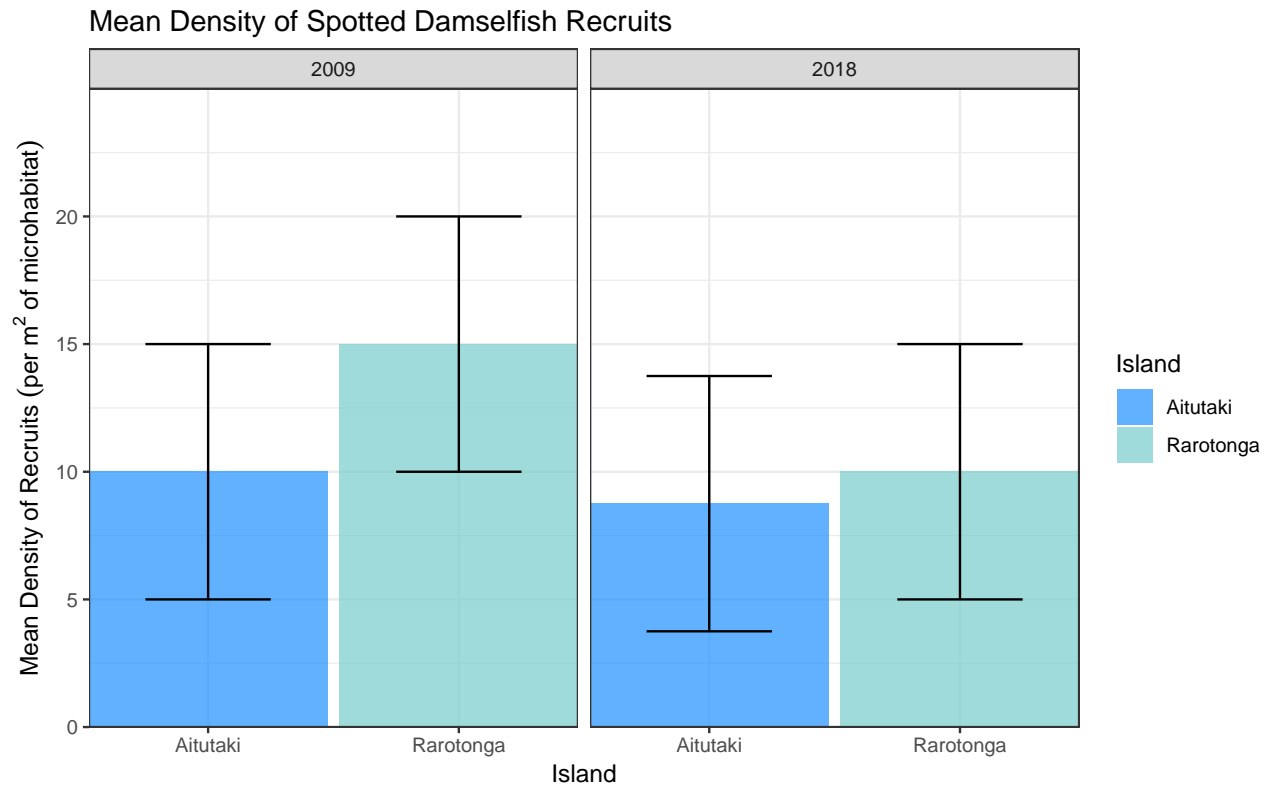
### Change in Density of Recruits

Tasks:

- Graph recruitment density for each species at each lagoon, separate by years







### Question 3

#### Density of Recruits by Microhabitat

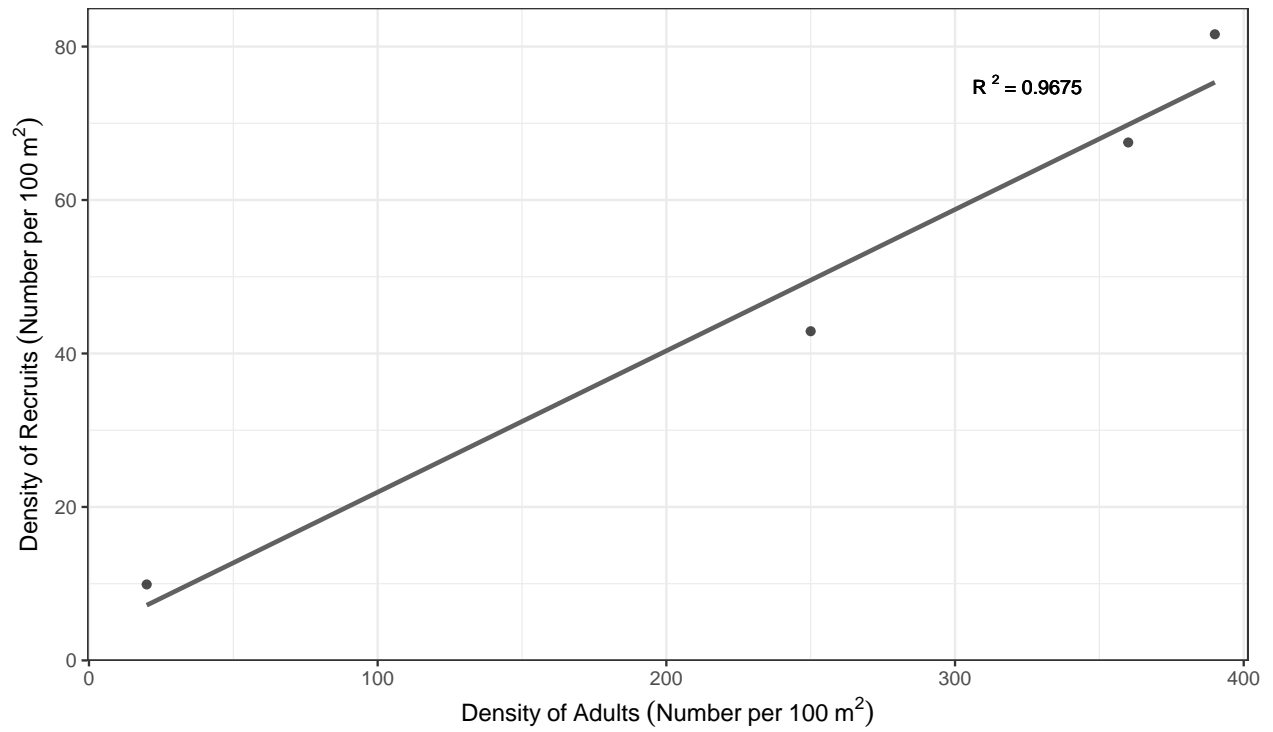
Tasks:

- Calculate the density of fish per 100 m<sup>2</sup> area of reef
- Make a scatterplot of relationship between density of recruits and adults

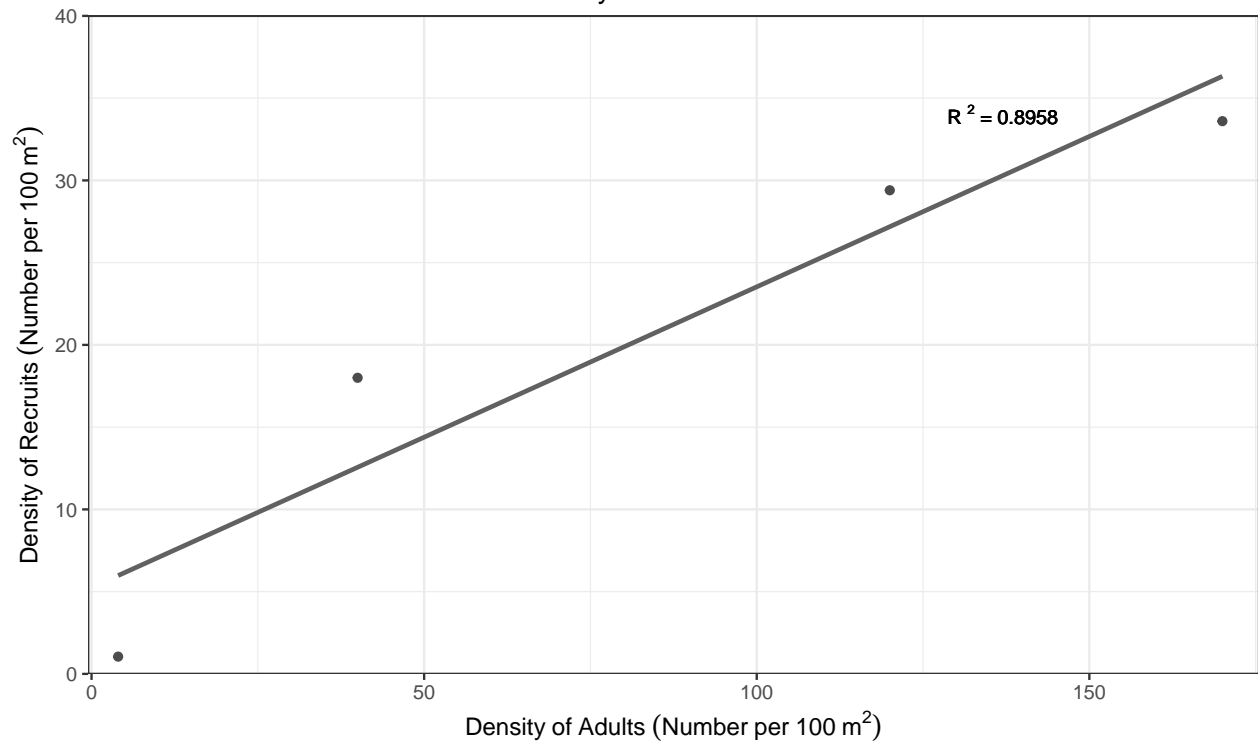
#### Calculate the Density

The density data gives the coverage of each microhabitat per 100 m<sup>2</sup> of reef. The recruitment density is per 1 m<sup>2</sup> of microhabitat. To get the density of recruits per 100 m<sup>2</sup> of reef, multiply the number of recruits by the density of the microhabitat.

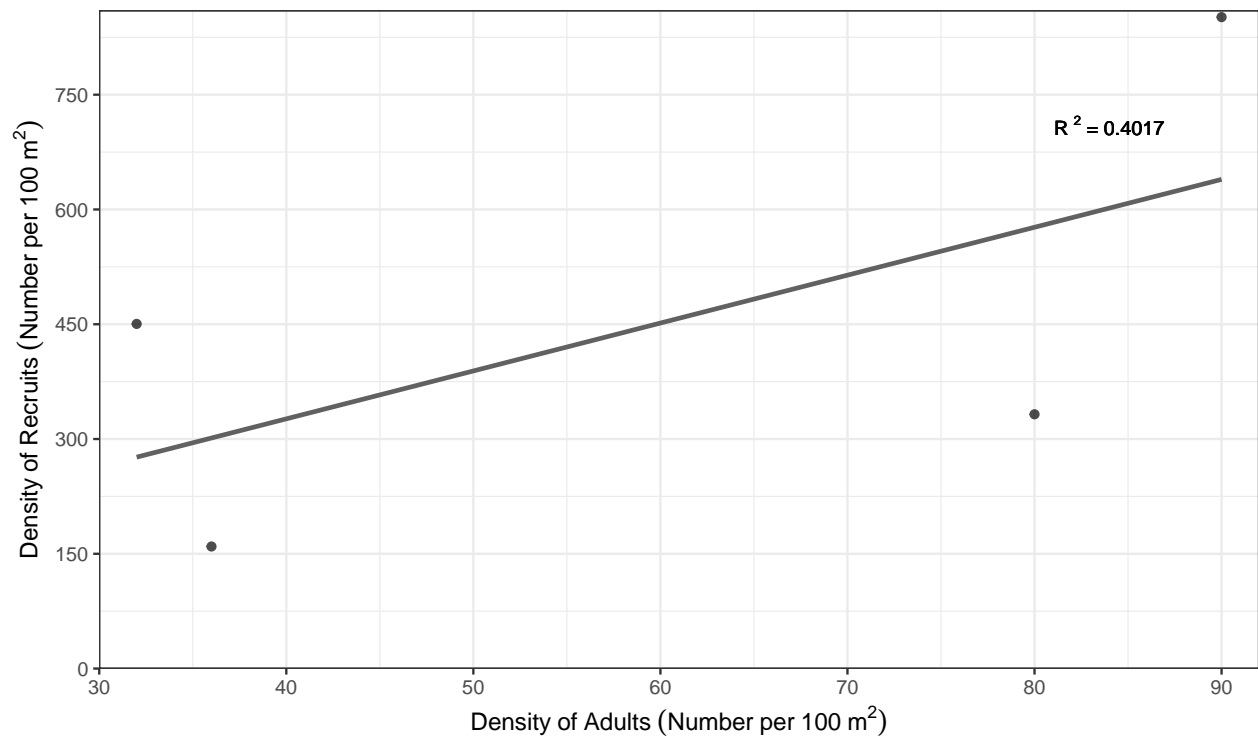
Surgeonfish Adult vs. Recruitment Density



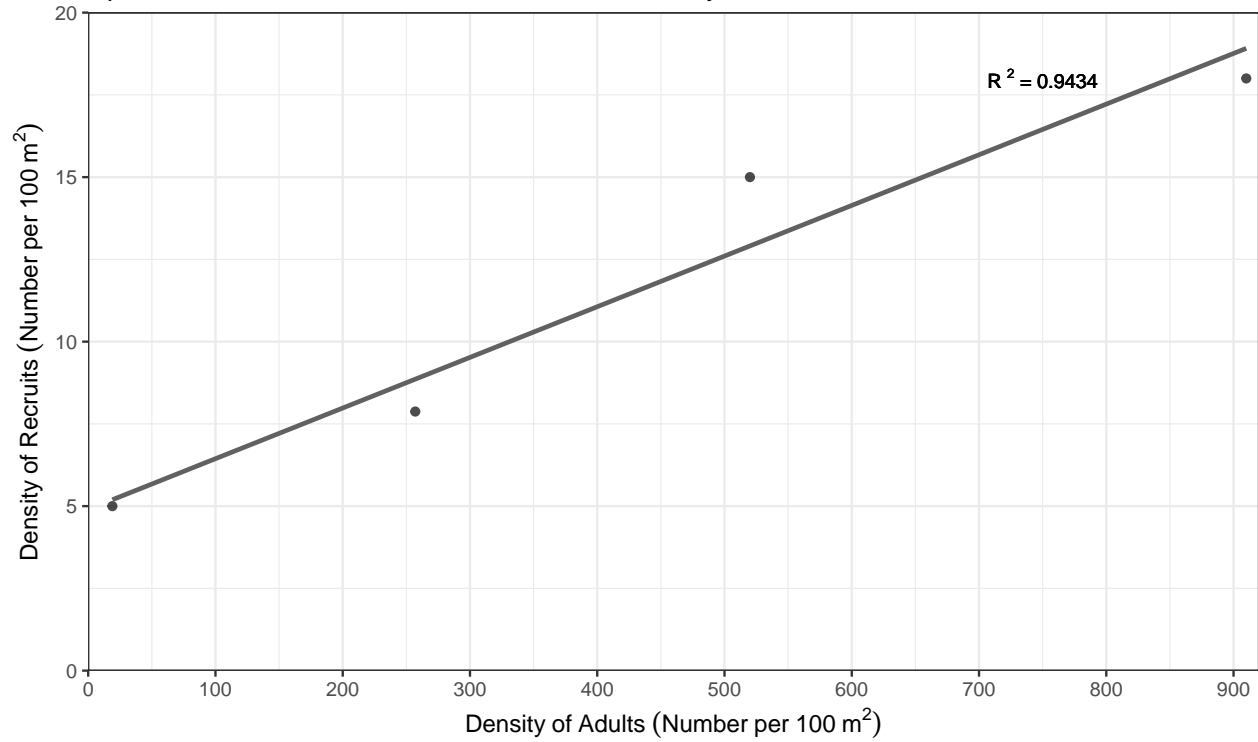
Coral Trout Adult vs. Recruitment Density



Yellow Damselfish Adult vs. Recruitment Density



Spotted Damselfish Adult vs. Recruitment Density



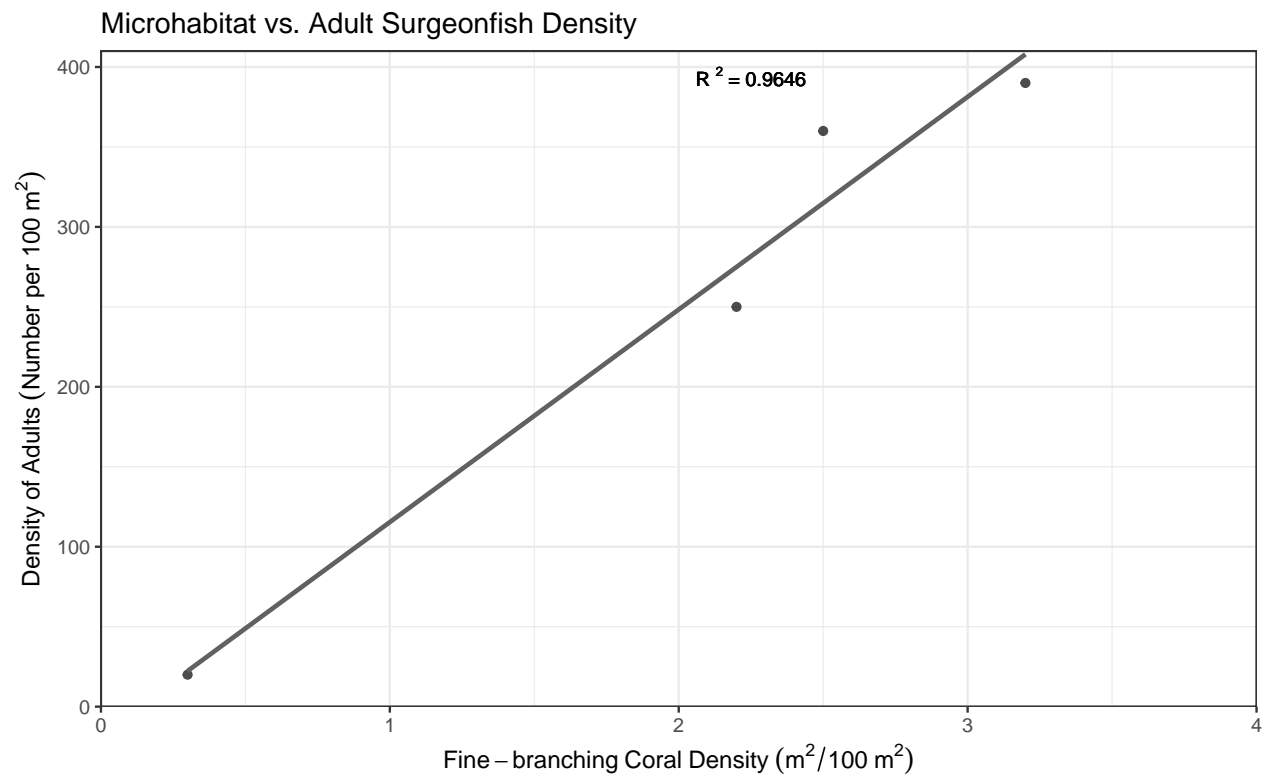


## Question 4

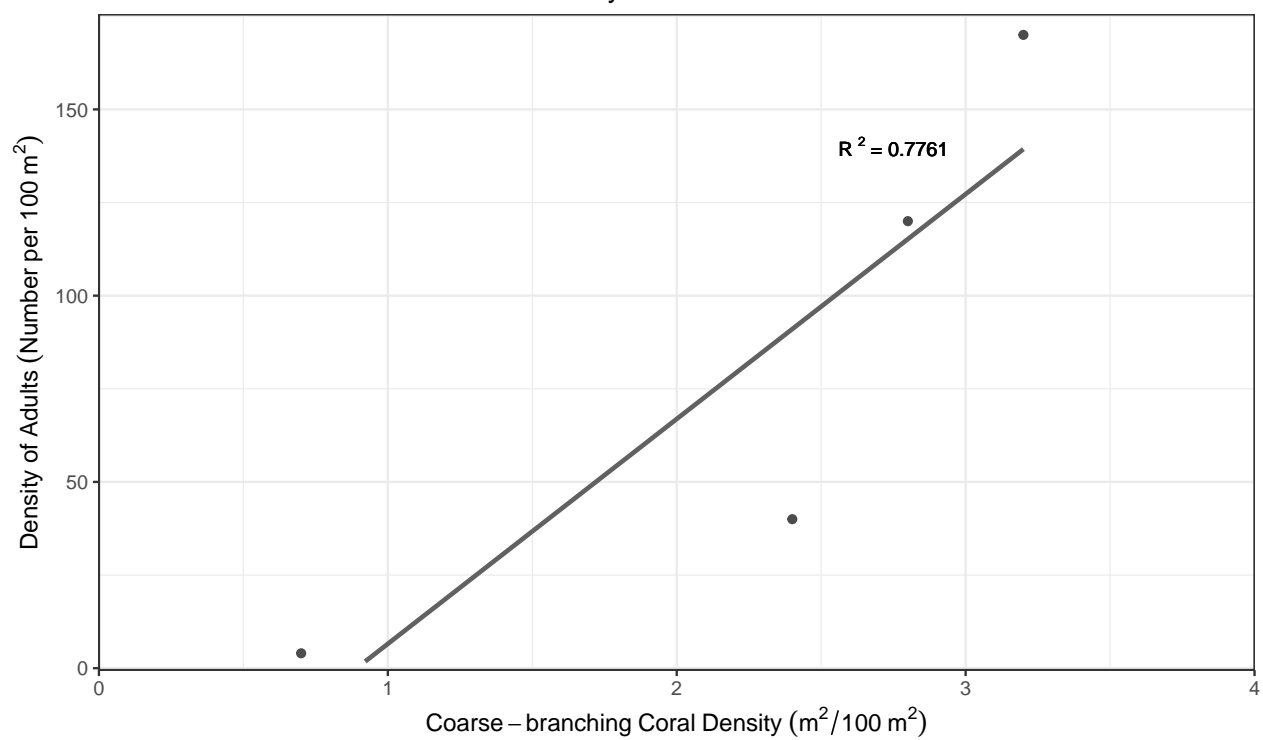
### Adult Density vs. Microhabitat

Tasks:

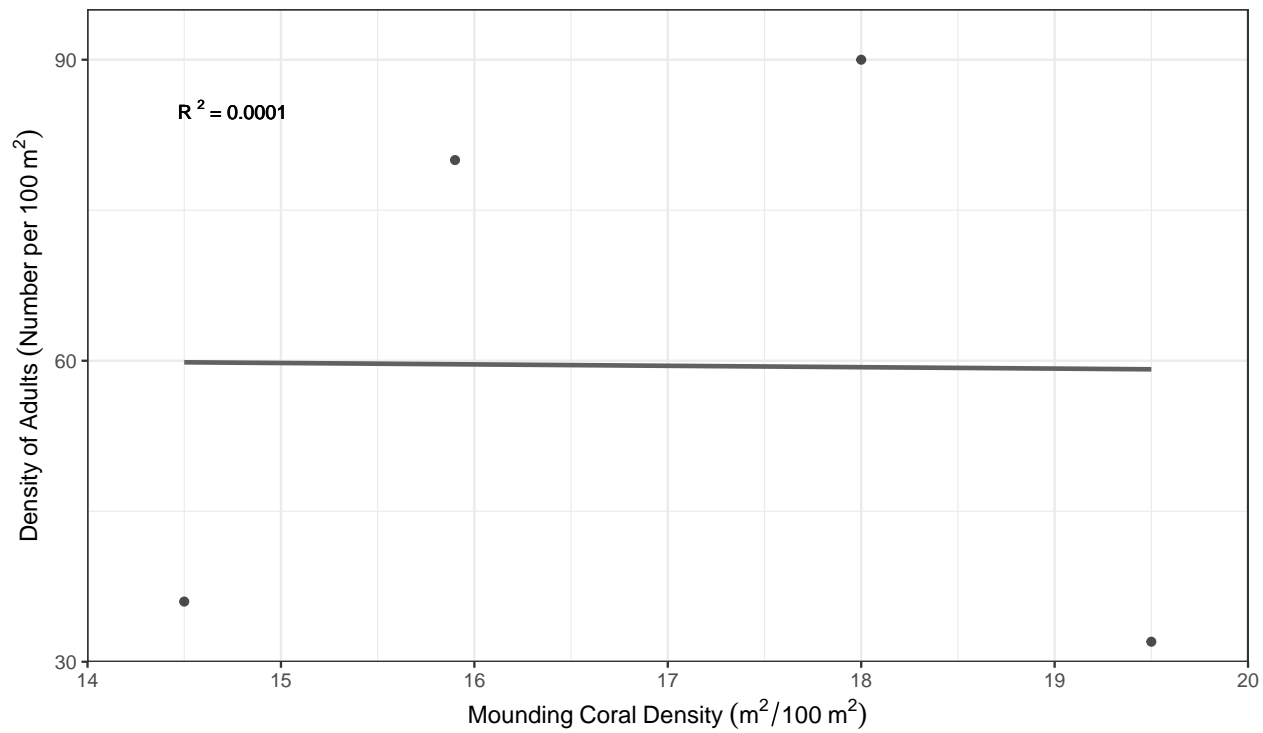
- Scatterplots of adult density vs. density of microhabitat used by young

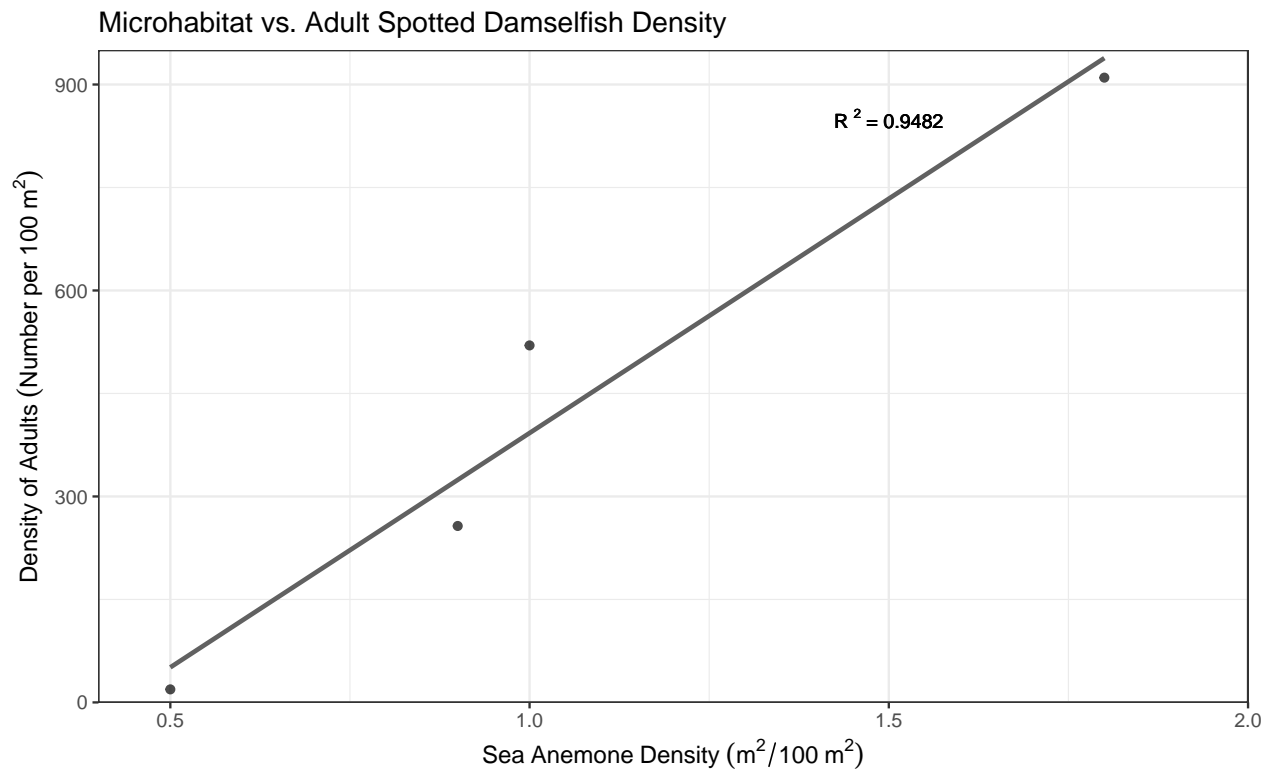


Microhabitat vs. Adult Coral Trout Density



Microhabitat vs. Adult Yellow Damselfish Density



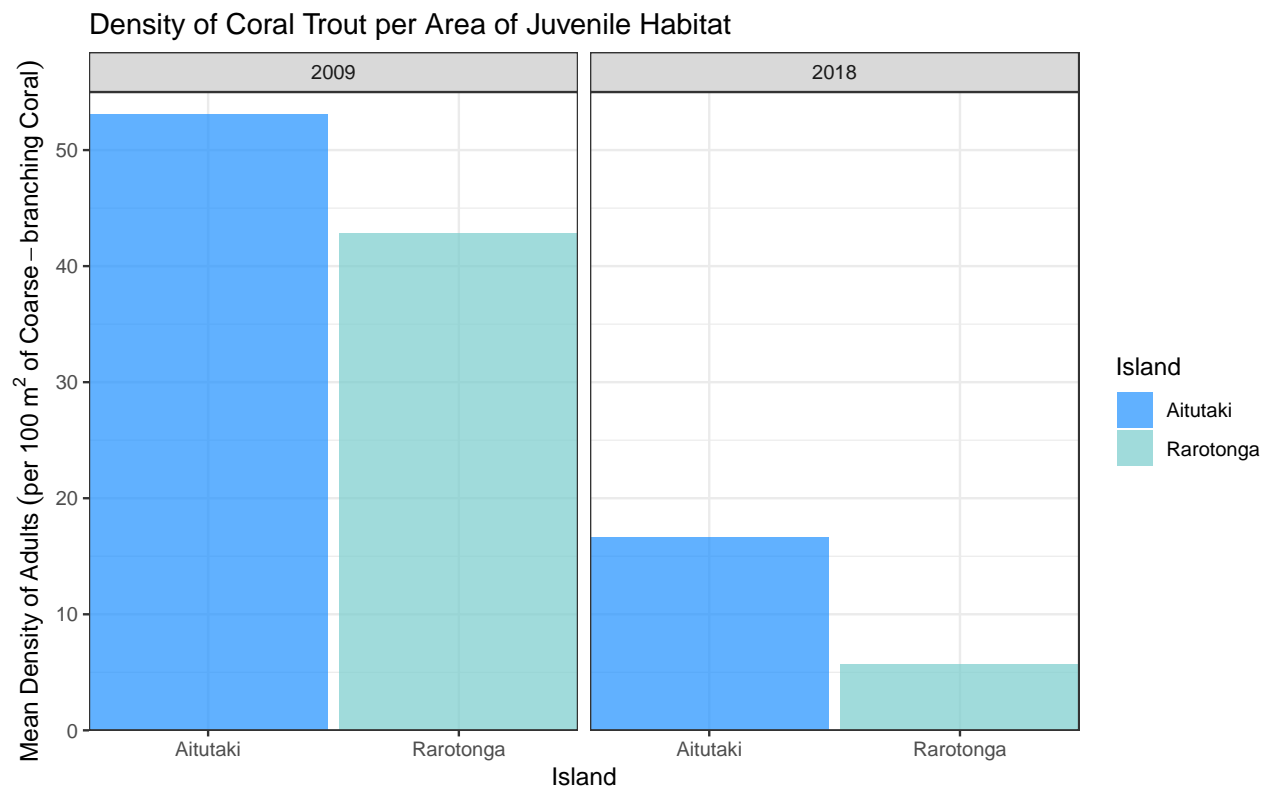
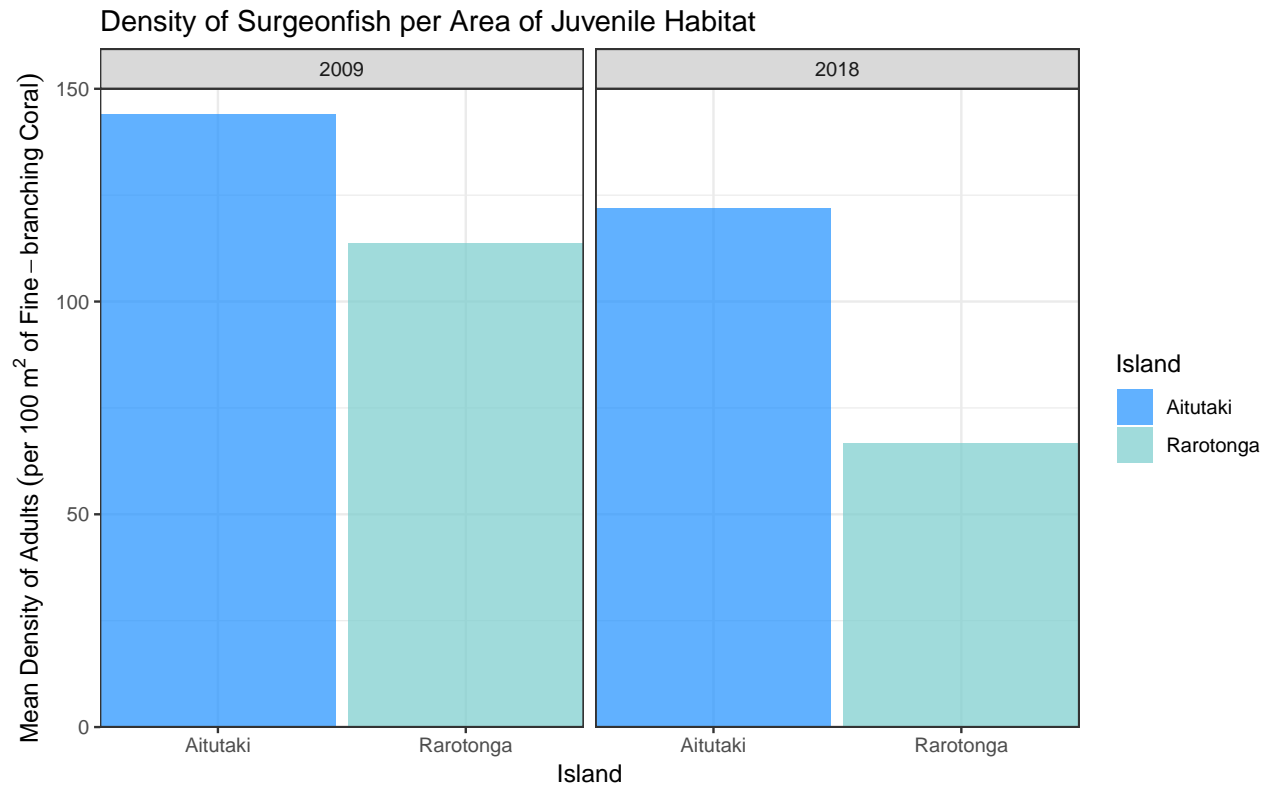


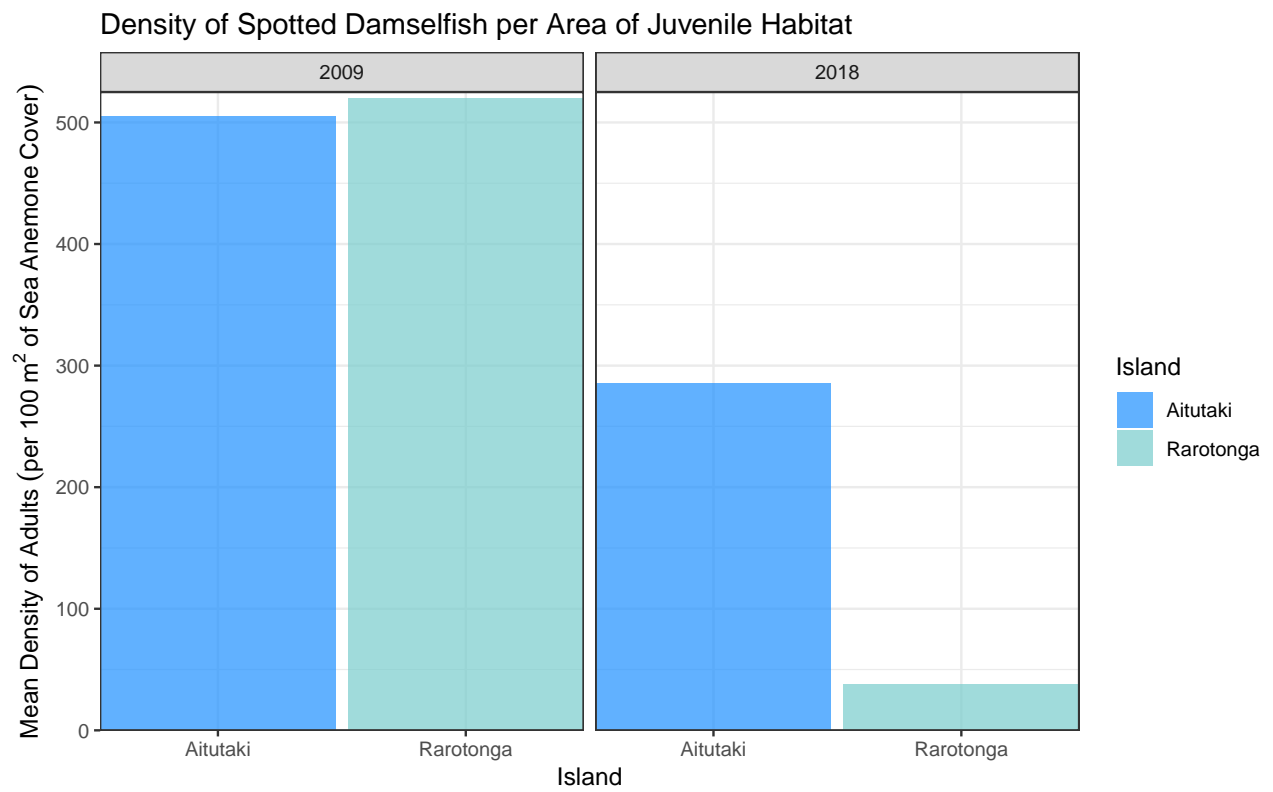
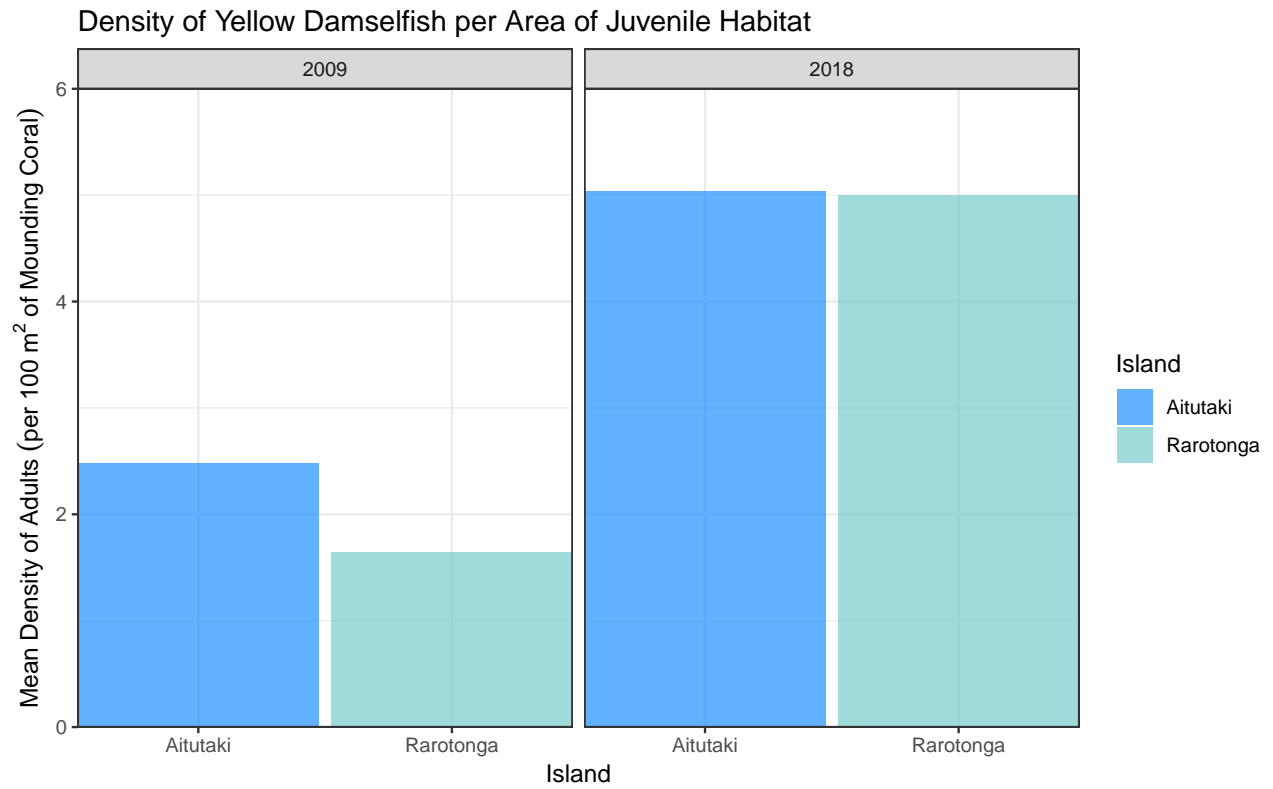
## Question 5

### Adult Density by Juvenile Microhabitat

Tasks:

- Calculate the density of adults per area of bottom covered by the microhabitat used by the young (for each lagoon and year)
- Graph them (similar to questions one and two)





## Question 6

### Adult Density Trends

Tasks:

- Scatterplots (adult density) with trend line and r-squared value
- Surgeon vs. Coral Trout
- Surgeon vs. Yellow Damselfish
- Surgeon vs. Spotted Damselfish
- Coral Trout vs. Yellow Damselfish
- Coral Trout vs. Spotted Damselfish
- Yellow Damselfish vs. Spotted Damselfish

