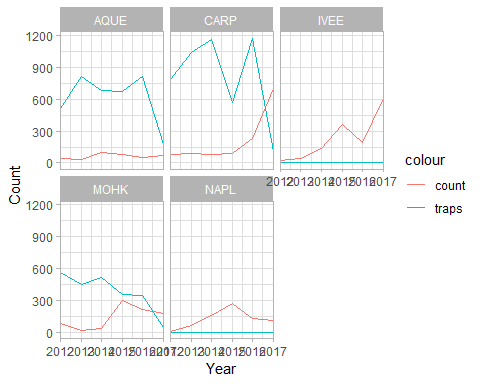
ESM206-assignment4

Claire Madden, Bridget Gibbons, Andrew Paterson

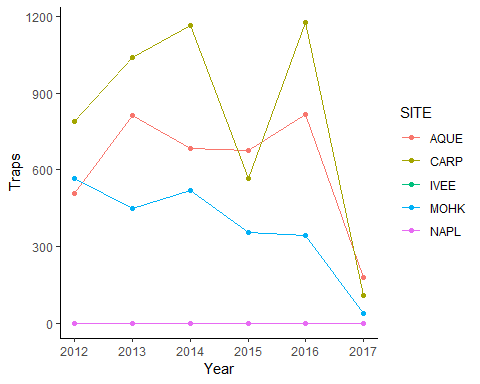
11/12/2018

# Part 1 (Claire)

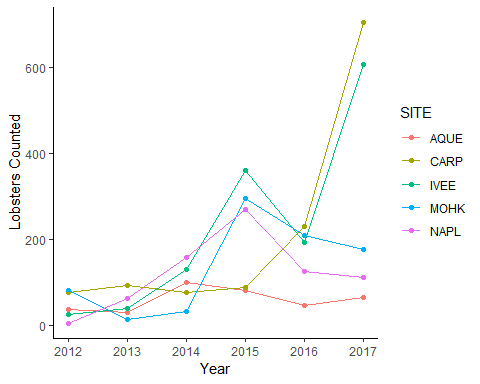
## Joining, by = c("SITE", "YEAR")



traps\_scatter <- ggplot(abundance\_traps, aes(x = YEAR, y = traps))+  
 geom\_point(aes(color = SITE))+  
 geom\_line(aes(color = SITE))+  
 theme\_classic()+  
 labs(x = "Year", y= "Traps")  
traps\_scatter

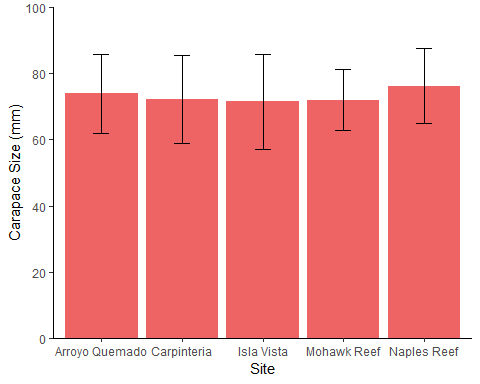


count\_scatter <- ggplot(abundance\_traps, aes(x = YEAR, y = count))+  
 geom\_point(aes(color = SITE))+  
 geom\_line(aes(color = SITE))+  
 theme\_classic()+  
 labs(x = "Year", y = "Lobsters Counted")  
  
count\_scatter

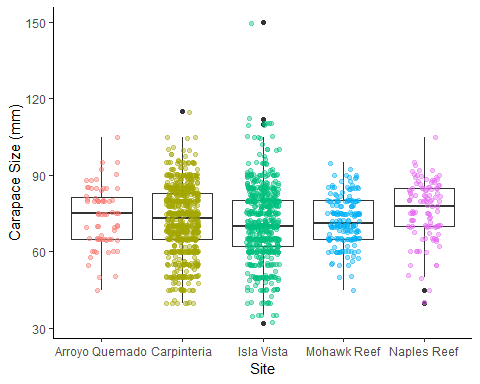


# Part 2 (Andrew)

size\_2017\_col



size\_2017\_boxplot



**Figure 1: Mean Lobster Carapace Length at Five LTER Sites in the Santa Barbara Channel in 2017**

## # A tibble: 5 x 3  
## Site `Mean Size` `Sample Size`  
## <chr> <dbl> <int>  
## 1 Arroyo Quemado 73.9 67  
## 2 Carpinteria 72.2 705  
## 3 Isla Vista 71.4 606  
## 4 Mohawk Reef 72 178  
## 5 Naples Reef 76.2 112

Site

Mean Carapace Size (mm)

Sample Size

Arroyo Quemado

73.90

67

Carpinteria

72.23

705

Isla Vista

71.45

606

Mohawk Reef

72.00

178

Naples Reef

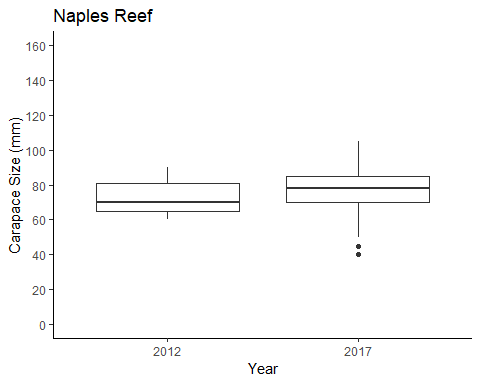
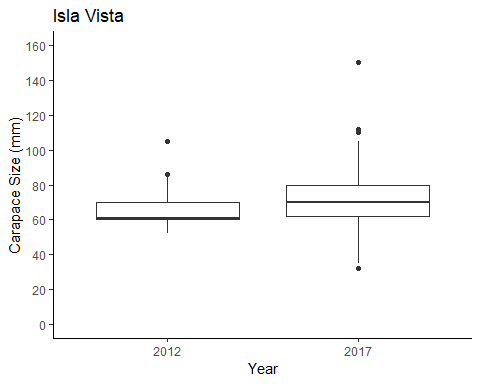
76.23

112

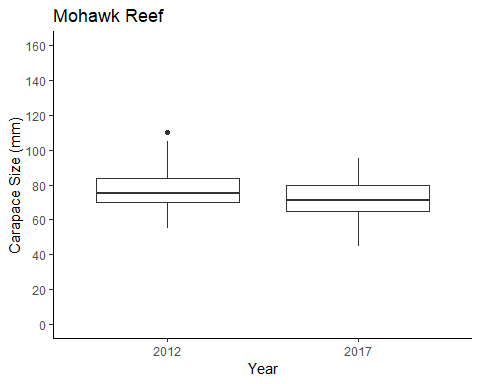
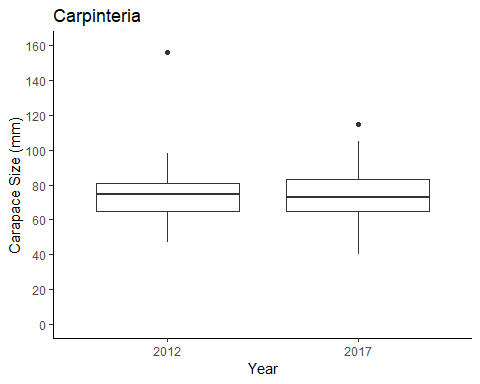
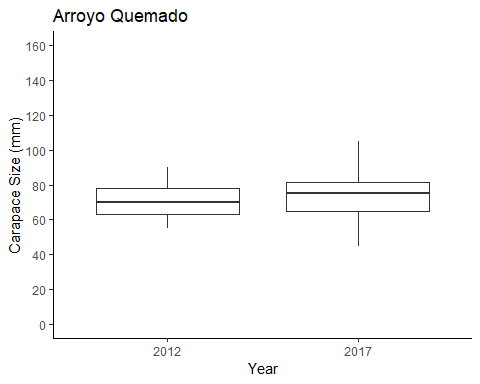
# Part 3 (Bridget)

# The following chunks are comparing 2012 and 2017 for each site individually

**Figures 4-5: Lobster Carapace Sizes inside Marine Protected Areas in 2012 and 2017** Caption



**Figures 6-8: Lobster Carapace Sizes outside of Marine Protected Areas in 2012 and 2017** Caption



# Part 4

## Warning: Setting row names on a tibble is deprecated.