Assignment4\_Lobsters

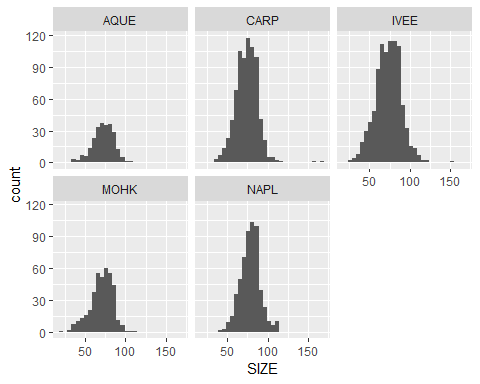
Robert Saldivar

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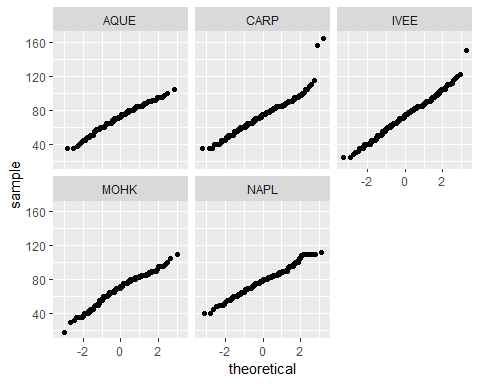
#2 Initial Data Editing  
lobster\_size\_edits <- lobster\_size %>%  
 filter(SIZE !=-99999) %>%  
 select(YEAR, SITE, SIZE, COUNT) # Edit Lobster Size data to remove -99999 data from size column and remove transect information  
   
  
lobster\_traps\_edits <- lobster\_traps %>%  
 filter(SITE=="AQUE" |SITE =="NAPL" |SITE=="MOHK" |SITE=="IVEE" |SITE=="CARP") %>%  
 select(YEAR, SITE, TRAPS)

#3 checking data for normality  
  
lobster\_size\_hist <- ggplot(lobster\_size\_edits, aes(x=SIZE)) +  
 geom\_histogram() +  
 facet\_wrap(~SITE)  
  
lobster\_size\_hist

## `stat\_bin()` using `bins = 30`. Pick better value with `binwidth`.

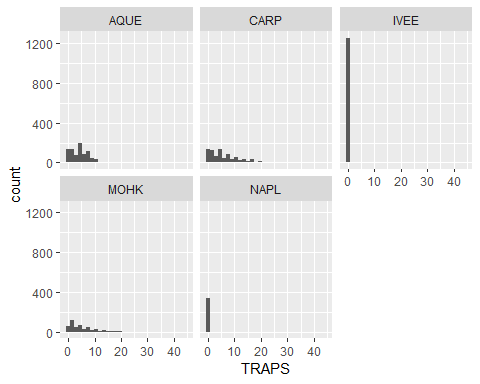


lobster\_size\_qq <- ggplot(lobster\_size\_edits, aes(sample=SIZE)) +  
 geom\_qq() +  
 facet\_wrap(~SITE)  
  
lobster\_size\_qq

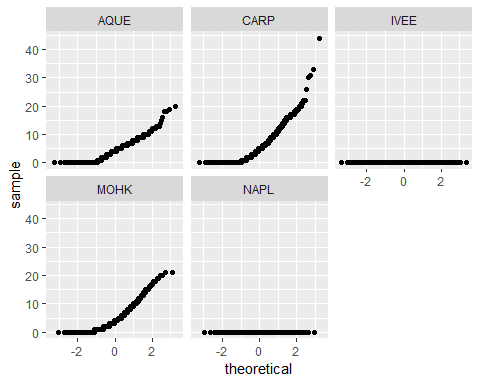


lobster\_traps\_hist <- ggplot(lobster\_traps\_edits, aes(x=TRAPS)) +  
 geom\_histogram() +  
 facet\_wrap(~SITE)  
  
lobster\_traps\_hist

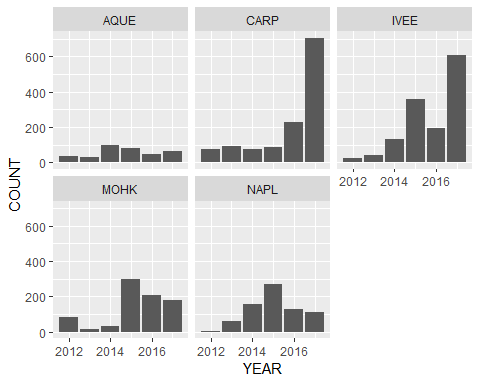
## `stat\_bin()` using `bins = 30`. Pick better value with `binwidth`.



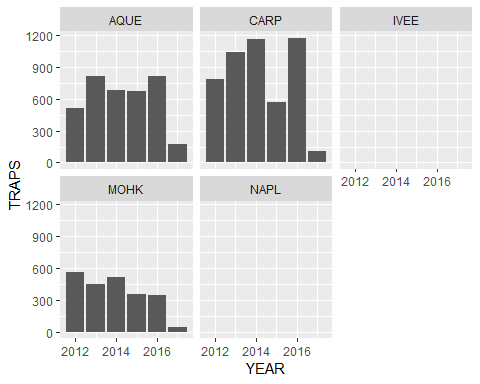
lobster\_traps\_qq <- ggplot(lobster\_traps\_edits, aes(sample=TRAPS)) +  
 geom\_qq() +  
 facet\_wrap(~SITE)  
  
lobster\_traps\_qq



#4 create graphs of abundance and fishing pressure from 2012-2017  
  
abundance\_col <- ggplot(lobster\_size\_edits, aes(x=YEAR, y=COUNT)) +  
 geom\_col() +  
 facet\_wrap(~SITE)  
  
abundance\_col



fishing\_pressure\_col <- ggplot(lobster\_traps\_edits, aes(x=YEAR, y=TRAPS)) +  
 geom\_col() +  
 facet\_wrap(~SITE)  
  
fishing\_pressure\_col



#put lobster size data into case format.  
  
lobster\_case\_format <- lobster\_size\_edits %>%  
 filter(YEAR=="2012" |YEAR=="2017") %>%  
 as.data.frame() %>%  
 expand.dft(freq="COUNT")