Species_ID_Figures

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```
library(tidyverse)
```

```
## Warning: package 'tidyverse' was built under R version 4.0.5
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.1 --
```

```
## v ggplot2 3.3.3     v purrr   0.3.4
## v tibble  3.1.4     v dplyr   1.0.7
## v tidyr   1.1.3     v stringr 1.4.0
## v readr   1.4.0     v forcats 0.5.1
```

```
## Warning: package 'tibble' was built under R version 4.0.5
```

```
## Warning: package 'tidyr' was built under R version 4.0.5
```

```
## Warning: package 'dplyr' was built under R version 4.0.5
```

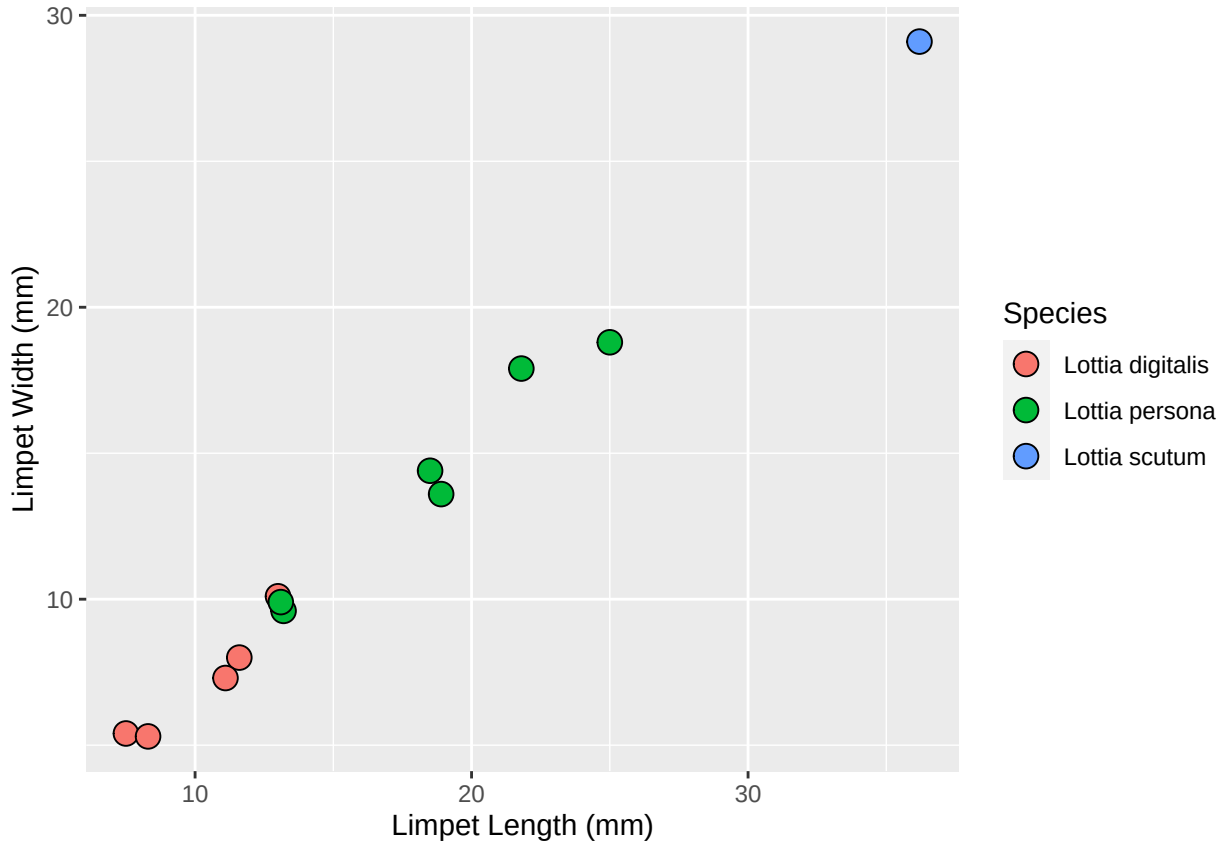
```
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
ID_data <- read_csv('Species_ID_Measurements.csv')
```

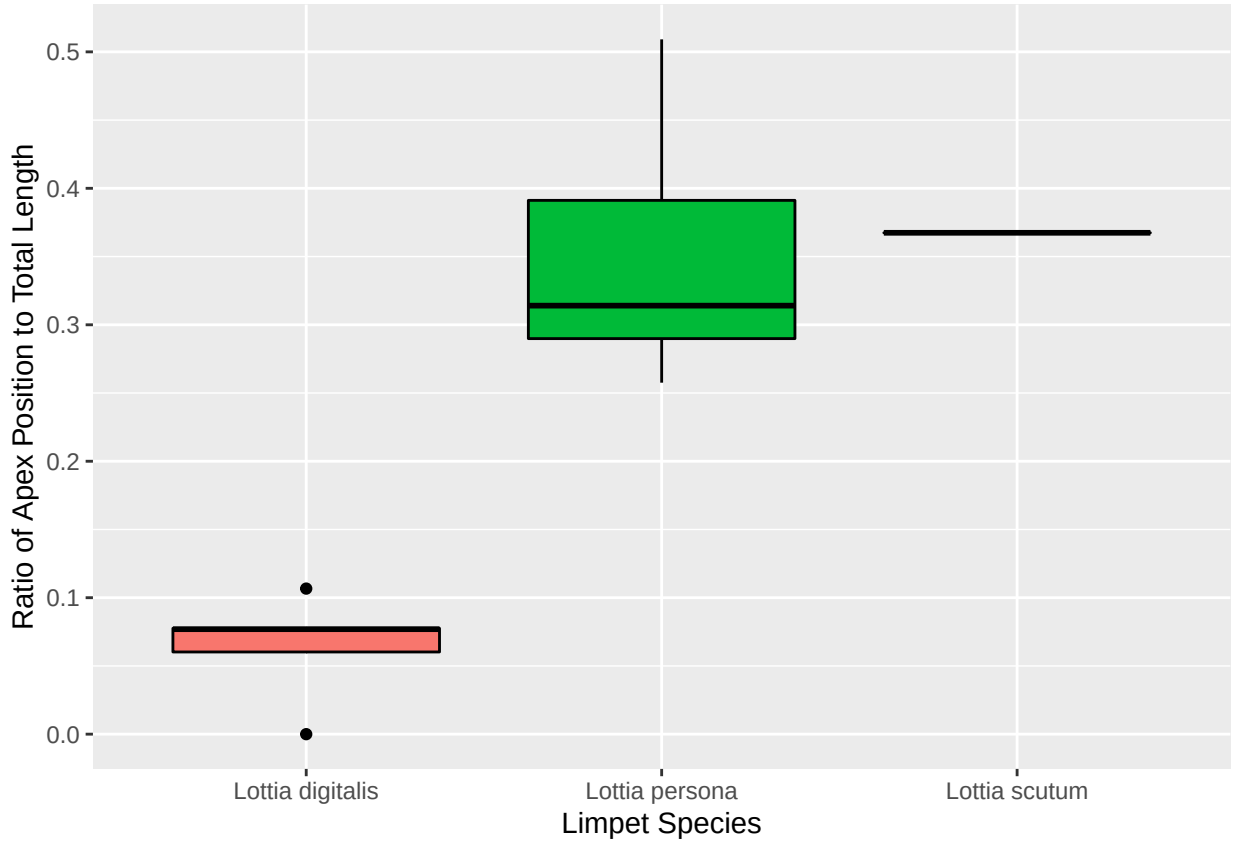
```
##
## -- Column specification --------------------------------------------------------
## cols(
##   Species = col_character(),
##   Length_mm = col_double(),
##   Width_mm = col_double(),
##   Height_mm = col_double(),
##   Apex_mm = col_double()
## )
```

```
limpets <- ID_data %>% filter( Species == 'Lottia digitalis'| Species == 'Lottia persona' |
                                 Species == "Lottia scutum") %>% mutate(Apex_ratio = Apex_mm / Length_mm
mussels <-ID_data %>% select(!c(Apex_mm)) %>% filter(Species == 'Mytilus trossulus' |
                                                       Species == 'Mytilus californianus') %>%
  mutate(Height_Width_ratio = Height_mm / Width_mm)
```

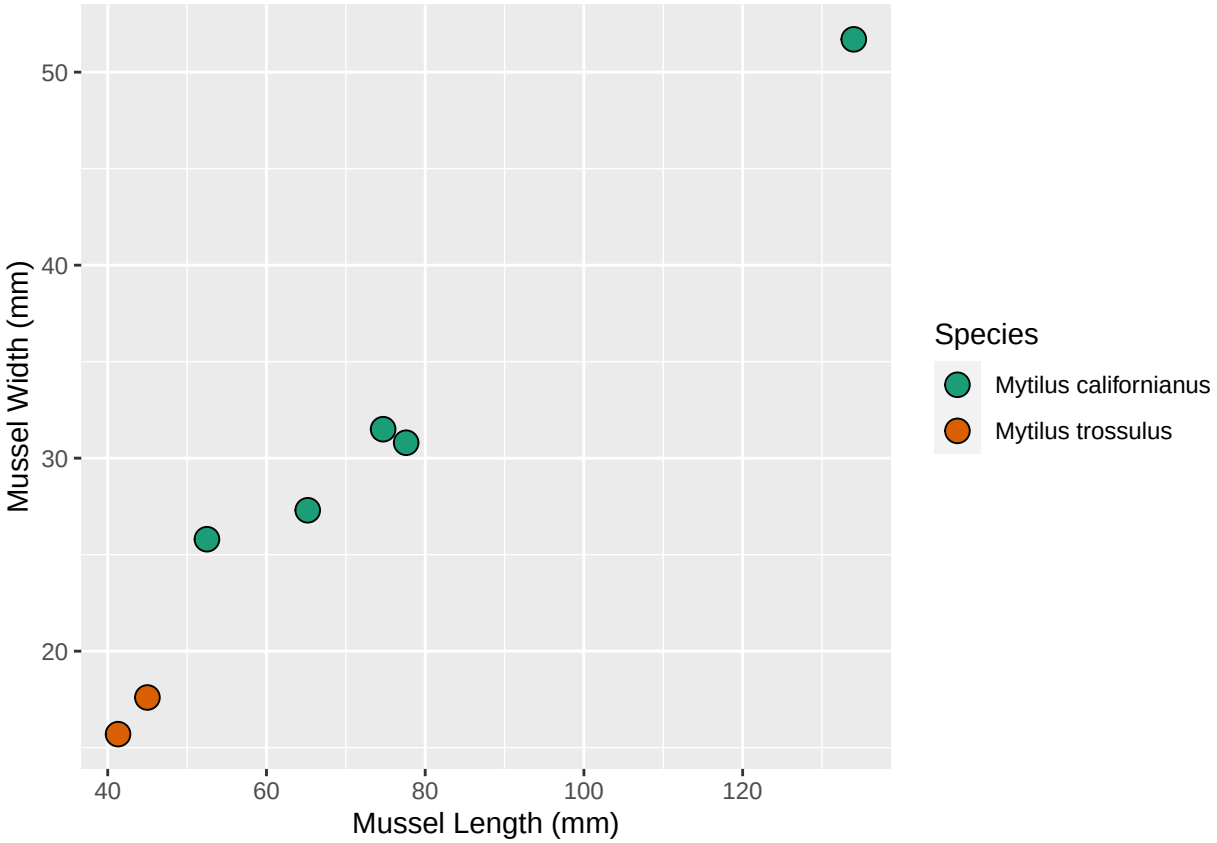
```
limpet_plot_1 = ggplot(data = limpets) +
  geom_point(aes(x = Length_mm, y = Width_mm, fill = Species),
             colour = "black",
             size = 4,
             shape = 21) +
  theme_grey() +
  labs(x = "Limpet Length (mm)", y = "Limpet Width (mm)")
limpet_plot_1
```



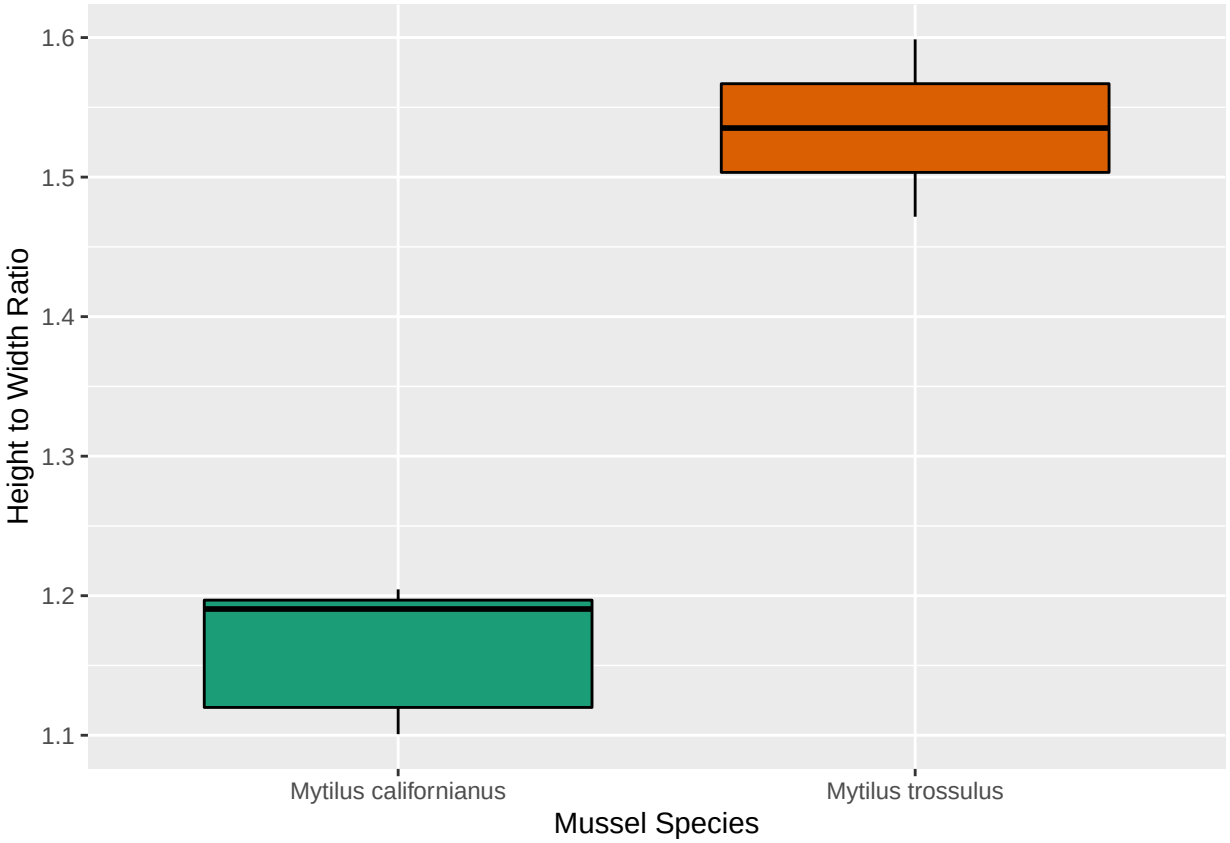

```
limpet_plot_2 <- ggplot(data = limpets) + geom_boxplot(aes(x = Species, y = Apex_ratio, fill = Species)
  scale_color_grey() + theme_grey()+ labs(x = "Limpet Species", y = "Ratio of Apex Position to Total Le
limpet_plot_2
```



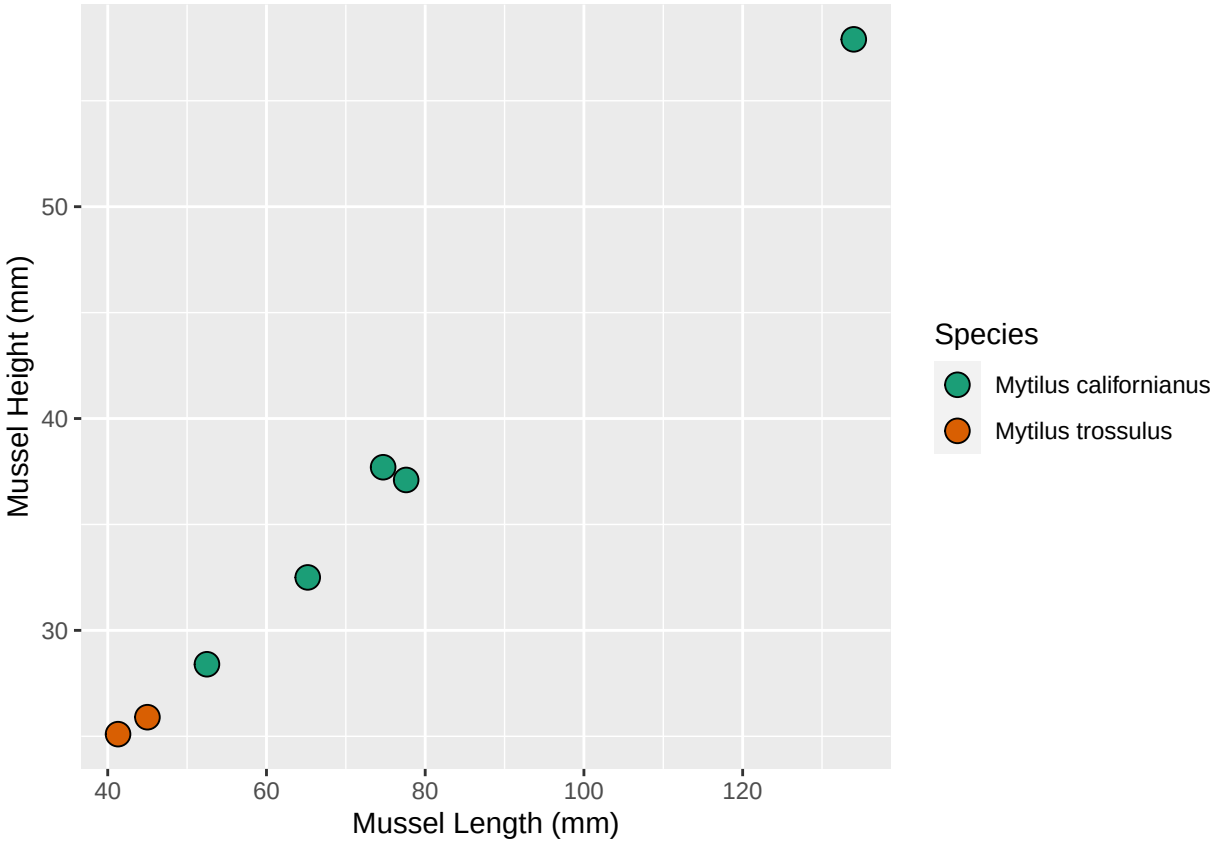

```
mussel_plot_1 = ggplot(data = mussels) +
  geom_point(aes(x = Length_mm, y = Width_mm, fill = Species),
             colour = "black",
             size = 4,
             shape = 21) +
  theme_grey( ) + scale_fill_brewer(palette="Dark2")+
  labs(x = "Mussel Length (mm)", y = "Mussel Width (mm)")
mussel_plot_1
```




```
mussel_plot_2 <- ggplot(data = mussels) + geom_boxplot(aes(x = Species, y = Height_Width_ratio, fill = S
  scale_color_grey() + theme_grey()+ scale_fill_brewer(palette="Dark2")+ labs(x = "Mussel Species", y =
mussel_plot_2
```




```
mussel_plot_3 = ggplot(data = mussels) +
  geom_point(aes(x = Length_mm, y = Height_mm, fill = Species),
             colour = "black",
             size = 4,
             shape = 21) +
  theme_grey( ) + scale_fill_brewer(palette="Dark2")+
  labs(x = "Mussel Length (mm)", y = "Mussel Height (mm)")
mussel_plot_3
```


Mussel Height (mm)
50
40
30
40
60
80
100
120
Mussel Length (mm)
Species
Mytilus californianus
Mytilus trossulus