## Figure 2

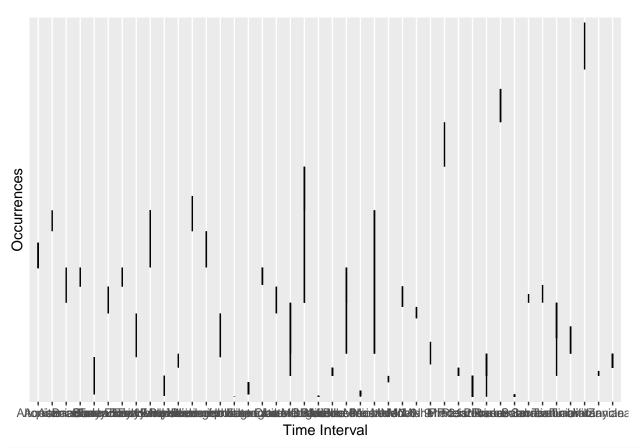
## Haily Kil

March 10, 2017

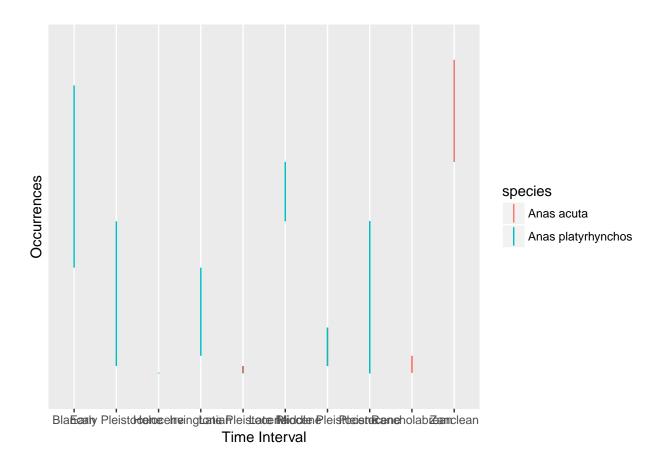
```
library(ggplot2)
setwd("/home/eeb177-student/Desktop/eeb-177/eeb-177-final-project/final/")
anatidae <- read.csv("/home/eeb177-student/Desktop/eeb-177/eeb-177-final-project/final/anatidae_1.csv",
anatidae_occ <- ggplot(anatidae, aes(V6, ymin = V12, ymax = V11, color = V9))</pre>
anatidae_occ <- anatidae_occ + geom_linerange()</pre>
anatidae_occ + scale_x_discrete(name="Species") + scale_y_discrete(name="Occurrences") + scale_color_di
                                    Time Interval
                                        Altonian
                                                                  Holocene
                                                                                        Montehermosan
                                                                  Irvingtonian
                                                                                        MP 21
                                        Aquitanian
                                        Astaracian
                                                                  Langhian
                                                                                        Piacenzian
                                                                  Late Clarendonian
                                                                                        Pleistocene
                                        Barstovian
                                                                                        Pliocene
                                        Blancan
                                                                  Late Miocene
 Occurrences
                                        Clarendonian
                                                                  Late Oligocene
                                                                                        Priabonian
                                        Early Barstovian
                                                                  Late Pleistocene
                                                                                        Rancholabrean
                                        early Early Hemphillian
                                                                  Late Pliocene
                                                                                        Sarmatian
                                        Early Miocene
                                                                  Middle Miocene
                                                                                        Serravallian
                                                                  Middle Pleistocene
                                        Early Pleistocene
                                                                                        Tortonian
                                        Early Pliocene
                                                                  Miocene
                                                                                        Turolian
                                                                  MN 17
                                        Harrisonian
                                                                                        Uintan
                                                                  MN<sub>6</sub>
                                        Hemingfordian
                                                                                        Villanyian
                                        Hemphillian
                                                                  MN<sub>9</sub>
                                                                                        Zanclean
```

```
library(ggplot2)
setwd("/home/eeb177-student/Desktop/eeb-177/eeb-177-final-project/final/")
p1 <- read.csv("/home/eeb177-student/Desktop/eeb-177/eeb-177-final-project/final/anatidae_1.csv", heade
p1 <- ggplot(p1, aes(V9, ymin = V12, ymax = V11))
p1 <- p1 + geom_linerange()
p1 + scale_x_discrete(name="Time Interval") + scale_y_discrete(name="Occurrences")</pre>
```

**Species** 



```
p1 <- p1 + coord_flip()
library(ggplot2)
setwd("/home/eeb177-student/Desktop/eeb-177/eeb-177-final-project/final/")
p2 <- read.csv("/home/eeb177-student/Desktop/eeb-177/eeb-177-final-project/final/2birds.csv", header = 1
p2 <- ggplot(p2, aes(V9, ymin = V12, ymax = V11, color=V6))
p2 <- p2 + geom_linerange()
p2 + scale_x_discrete(name="Time Interval") + scale_y_discrete(name="Occurrences") + scale_color_discrete</pre>
```



p2 <- p2 + coord\_flip()
p2 + scale\_x\_discrete(name="Time Interval") + scale\_y\_discrete(name="Occurrences") + scale\_color\_discrete</pre>

