7/5/2019 alligators.R

```
1
2
   3
   4
5
   setwd("/Users/joanmeiners/Dropbox/NOLA.com/ESA series for Sara/alligators")
7
   library(ggplot2)
8
9
   # Load data
10
   gators = read.csv("alligators.csv", header = TRUE)
   View(gators)
11
12
13
   # remove first three rows, unreliable/unusable data
   colnames(gators) = c("Year", "Thousands Nests", "Length", "Bonus season")
14
15
16
   # change classes
17
   gators$Thousands_Nests = as.numeric(as.character(gators$Thousands_Nests))
   gators$Length = as.numeric(as.character(gators$Length))
19
   gators$Bonus season = as.numeric(as.character(gators$Bonus season))
20
21
   # make new column
22
   gators$Nests = as.numeric(gators$Thousands Nests*1000)
23
24
   # plot gator nests and length over time
25
   quartz(width = 10, height = 6)
   ggplot(gators, aes(x = Year, y = Nests)) +
26
27
    geom point() +
     geom smooth(method = "lm", color = "darkgreen") +
28
29
     xlab("Year") + ylab("Estimated Number of Nests") +
     theme(axis.title = element text(family = "Trebuchet MS", color="#666666", face="bold",
30
   size=15)) +
31
    theme(axis.text = element_text(family = "Trebuchet MS", color="#666666", face="bold",
   size=10)) +
     scale x continuous(breaks=c(1970, 1980, 1990, 2000, 2010, 2017)) +
32
33
     scale y continuous(labels = function(x) paste0(scales::comma(x)))
34
35
   tiff(filename = "Gators", units = "in", compression = "lzw", res = 300, width = 10,
   height = 6)
   dev.off()
36
37
```