

Plotting data in R for rookies

First step: Make sure it's tidy!

Some things I had to fix from my own data...

DATES:

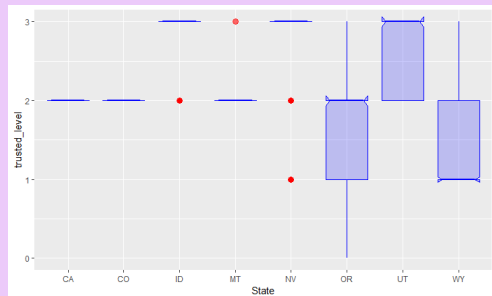
```
pygmyrabbits_Date <- as.Date(pygmyrabbits$Date,  
format="%m/%d/%Y")
```

CHANGING VALUES:

```
pygmyrabbits$State <- as.character(pygmyrabbits$State)  
pygmyrabbits$State[pygmyrabbits$State == "wy"] <- "WY"
```

Removing NAs:

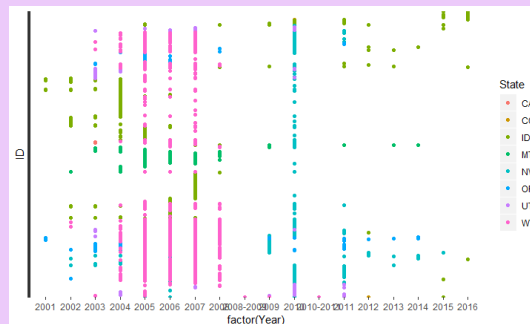
```
pygmyrabbits$Date[!is.na(pygmyrabbits$Date)] --omitted 9421 entries  
pygmyrabbits$State[!is.na(pygmyrabbits$State)]-- omitted 9421 entries
```



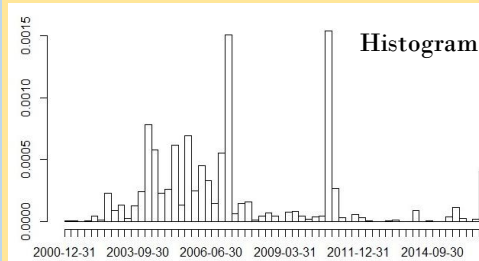
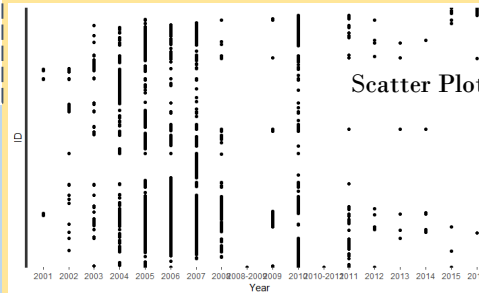
```
c <- ggplot(pygmyrabbits, aes(x =  
State, y = trusted_level, col = State))  
c + geom_point() + theme(  
axis.text.y = element_blank())
```

Style

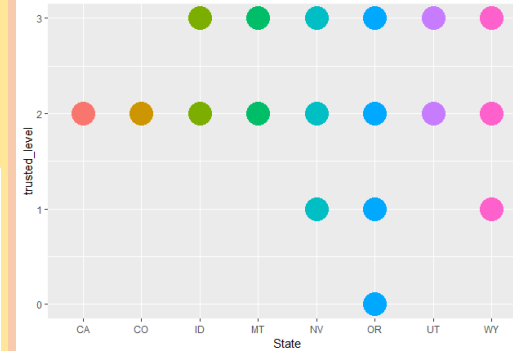
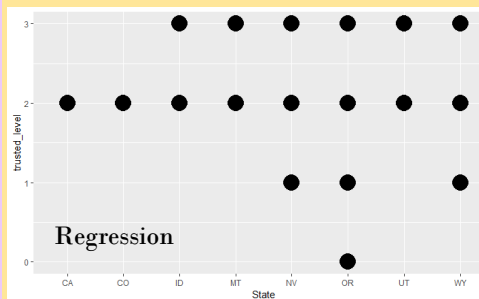
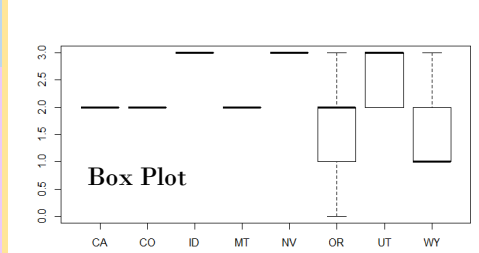
```
ggplot(pygmyrabbits, aes(x=State,  
y=trusted_level)) +  
geom_boxplot(color="blue", fill="blue",  
alpha=0.2, notch=TRUE,  
notchwidth = 0.8, outlier.colour="red",  
outlier.fill="red", outlier.size=3)
```



What kind of plot looks best?



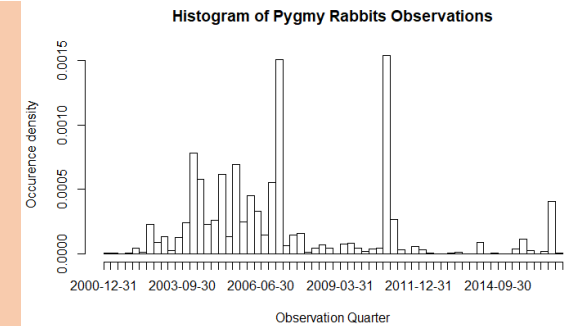
IS IT BORING?



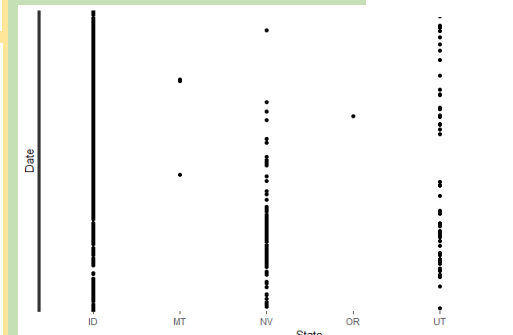
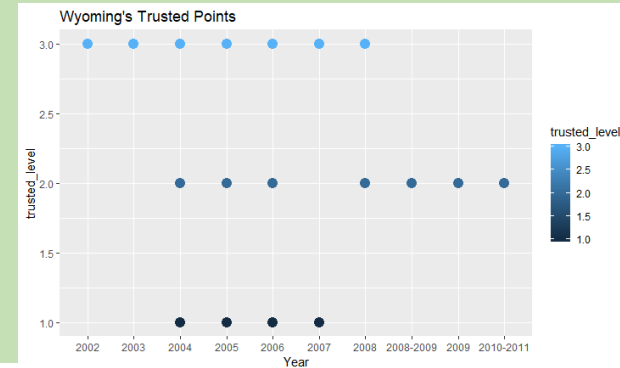
```
c <- ggplot(pygmyrabbits,  
aes(x = State, y =  
trusted_level, col = State))  
c + geom_point(size = 10)
```

Labels

```
hist(pygmyrabbits_Date,  
breaks = "quarters", main =  
"Histogram of Pygmy  
Rabbits Observations", xlab =  
"Observation Quarter", ylab =  
"Occurrence density")
```



```
scale4 <- ggplot(data =  
subset(pygmyrabbits, State  
== "WY"), aes(x = Year, y  
= trusted_level, col =  
trusted_level)) +  
geom_point(size = 4) +  
labs(title = "Wyoming's  
Trusted Points")
```



```
scale3 <- ggplot(data =  
subset(pygmyrabbits,  
trusted_level == 3), aes(x =  
State, y = Date)) +  
geom_point() + theme(  
axis.text.y = element_blank())
```

Scale