Untitled

R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
library(ggplot2)
library(maps)
library(lattice)
library(caret)
library(gbm)
```

```
## Loaded gbm 2.1.5
```

```
library(gridExtra)

data(scat)
str(scat)
```

```
## 'data.frame':    110 obs. of  19 variables:
##  $ Species  : Factor w/ 3 levels "bobcat","coyote",..: 2 2 1 2 2 2 1 1 1 1 ...
##  $ Month    : Factor w/ 9 levels "April","August",..: 4 4 4 4 4 4 4 4 4 4 ...
##  $ Year     : int  2012 2012 2012 2012 2012 2012 2012 2012 2012 2012 ...
##  $ Site     : Factor w/ 2 levels "ANNU","YOLA": 2 2 2 2 2 2 1 1 1 1 ...
##  $ Location : Factor w/ 3 levels "edge","middle",..: 1 1 2 2 1 1 3 3 3 2 ...
##  $ Age      : int  5 3 3 5 5 5 1 3 5 5 ...
##  $ Number   : int  2 2 2 2 4 3 5 7 2 1 ...
##  $ Length   : num  9.5 14 9 8.5 8 9 6 5.5 11 20.5 ...
##  $ Diameter : num  25.7 25.4 18.8 18.1 20.7 21.2 15.7 21.9 17.5 18 ...
##  $ Taper    : num  41.9 37.1 16.5 24.7 20.1 28.5 8.2 19.3 29.1 21.4 ...
##  $ TI       : num  1.63 1.46 0.88 1.36 0.97 1.34 0.52 0.88 1.66 1.19 ...
##  $ Mass     : num  15.9 17.6 8.4 7.4 25.4 ...
##  $ d13C     : num  -26.9 -29.6 -28.7 -20.1 -23.2 ...
##  $ d15N     : num  6.94 9.87 8.52 5.79 7.01 8.28 4.2 3.89 7.34 6.06 ...
##  $ CN       : num  8.5 11.3 8.1 11.5 10.6 9 5.4 5.6 5.8 7.7 ...
##  $ ropey    : int  0 0 1 1 0 1 1 0 0 1 ...
##  $ segmented: int  0 0 1 0 1 0 1 1 1 1 ...
##  $ flat     : int  0 0 0 0 0 0 0 0 0 0 ...
##  $ scrape   : int  0 0 1 0 0 0 1 0 0 0 ...
```

```
sum(is.na(scat))
```

```
## [1] 47
```

```
df = subset(scat)
#Set the Species column as the target/outcome and convert it to numeric
df$Species<-as.numeric(factor(df$Species))

#Remove the Month, Year, Site, Location features
df = subset(scat, select = -c(Month,Year,Site, Location) )
```

Including Plots

You can also embed plots, for example:

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.