

# GERS2018

```
library(tidyr)
library(dplyr)

##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##     filter, lag

## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union

library(ggplot2)

ebird <- read.csv("eBird_workshop.csv")
```

## 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:

```
a_states <- c("AK", "AZ", "AR", "AL")

mebird <- ebird %>%
  mutate(a_state = ifelse(state %in% a_states, 1, 0),
        state_year = paste0(state, "_", year),
        river = "Pascagoula")

head(mebird)

##           species state year samplesize   presence a_state
## 1      Alder Flycatcher    AK 2008      2670 0.010356457     1
## 2      Aleutian Tern    AK 2008      2670 0.009003269     1
## 3      American Coot    AK 2008      2670 0.002441010     1
## 4      American Dipper    AK 2008      2670 0.024632608     1
## 5 American Golden-Plover    AK 2008      2670 0.041448449     1
## 6      American Kestrel    AK 2008      2670 0.007643158     1
##   state_year      river
## 1    AK_2008 Pascagoula
## 2    AK_2008 Pascagoula
## 3    AK_2008 Pascagoula
## 4    AK_2008 Pascagoula
## 5    AK_2008 Pascagoula
## 6    AK_2008 Pascagoula
```

```
ggplot(data=mebird,  
       aes(x=year, y=presence))+  
  geom_point()
```

