Factors Affecting Extinction

2023-03-04

Exercise 1

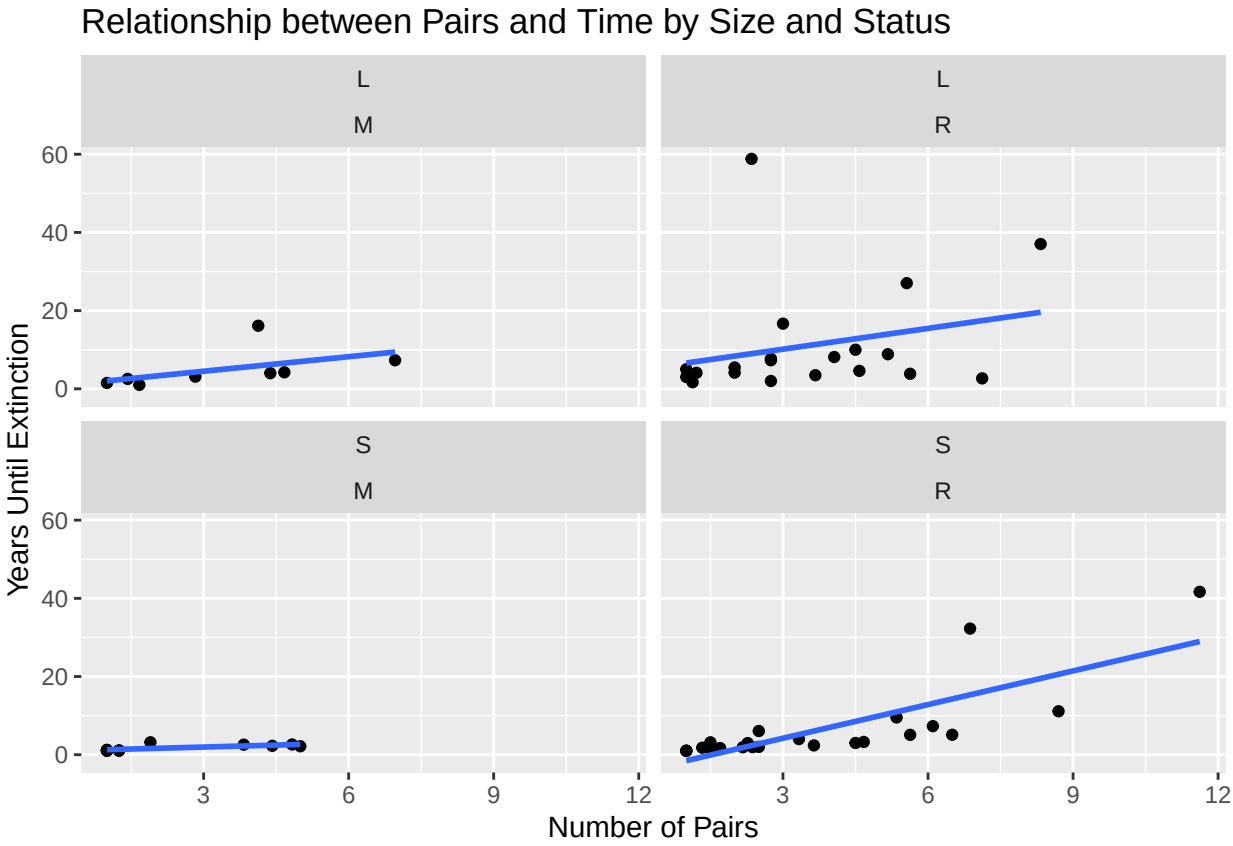
Begin with describing and fitting a full model in which the intercepts and slopes of the extinction times versus numbers of pairs may be different in all four combinations of size and migratory status.

```
##
## 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

## `geom_smooth()` using formula = 'y ~ x'
```



Comment: The relationship between years until extinction for a species and the number of nesting pairs seems to be bigger for migratory species of either size than for resident species.

```
## # A tibble: 4 x 4
##   intercept slope adj_r_squared combination
##       <dbl> <dbl>         <dbl> <chr>
## 1     0.777 1.24         0.139  L_M
## 2     4.83  1.77         0.0137 L_R
## 3     0.953 0.334        0.446  S_M
## 4    -4.40  2.87         0.609  S_R
```