

# FLs generate mating pairs

*Samuel*

*9/3/2019*

```
# setwd("Documents/research/projects/Lsax_fertilisation_time/")
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

dt = read.csv("../data/FLs_size_mm_sex.csv")
# head(dt)
dt_sex = split(dt, dt$sex)
for (f in 1:nrow(dt_sex$female)) {
  success=FALSE
  i=1
  f_log = log(dt_sex$female$size_mm[f])
  while (!success) {
    m_row = sample_n(dt_sex$male, size = 1)
    m_idx = which(dt_sex$male$snail_ID==m_row[, "snail_ID"])
    m_log = log(m_row[, "size_mm"])
    or = round(f_log - m_log, 1)
    # cat(or, "\n")
    success = (or >= 0.2 & or <= 0.4)
    i = i + 1
    if (or >= 0.2 & or <= 0.4) {
      cat("Female ID", dt_sex$female$snail_ID[f], "matched with male ID", m_row[, "snail_ID"], "\n")
      dt_sex$male = dt_sex$male[-m_idx,]
    }
  }
}

## Female ID 612 matched with male ID 675
## Female ID 613 matched with male ID 572
## Female ID 614 matched with male ID 662
## Female ID 615 matched with male ID 585
## Female ID 616 matched with male ID 649
## Female ID 617 matched with male ID 580
## Female ID 618 matched with male ID 578
## Female ID 619 matched with male ID 673
## Female ID 620 matched with male ID 669
## Female ID 621 matched with male ID 654
## Female ID 622 matched with male ID 670
## Female ID 623 matched with male ID 652
## Female ID 686 matched with male ID 583
```

## Female ID 687 matched with male ID 677  
## Female ID 688 matched with male ID 582  
## Female ID 689 matched with male ID 678  
## Female ID 690 matched with male ID 665  
## Female ID 691 matched with male ID 674  
## Female ID 692 matched with male ID 681  
## Female ID 693 matched with male ID 573  
## Female ID 694 matched with male ID 658  
## Female ID 695 matched with male ID 668  
## Female ID 696 matched with male ID 667  
## Female ID 697 matched with male ID 682  
## Female ID 624 matched with male ID 587  
## Female ID 625 matched with male ID 683  
## Female ID 626 matched with male ID 660  
## Female ID 627 matched with male ID 656  
## Female ID 628 matched with male ID 680  
## Female ID 629 matched with male ID 672  
## Female ID 630 matched with male ID 576  
## Female ID 631 matched with male ID 575