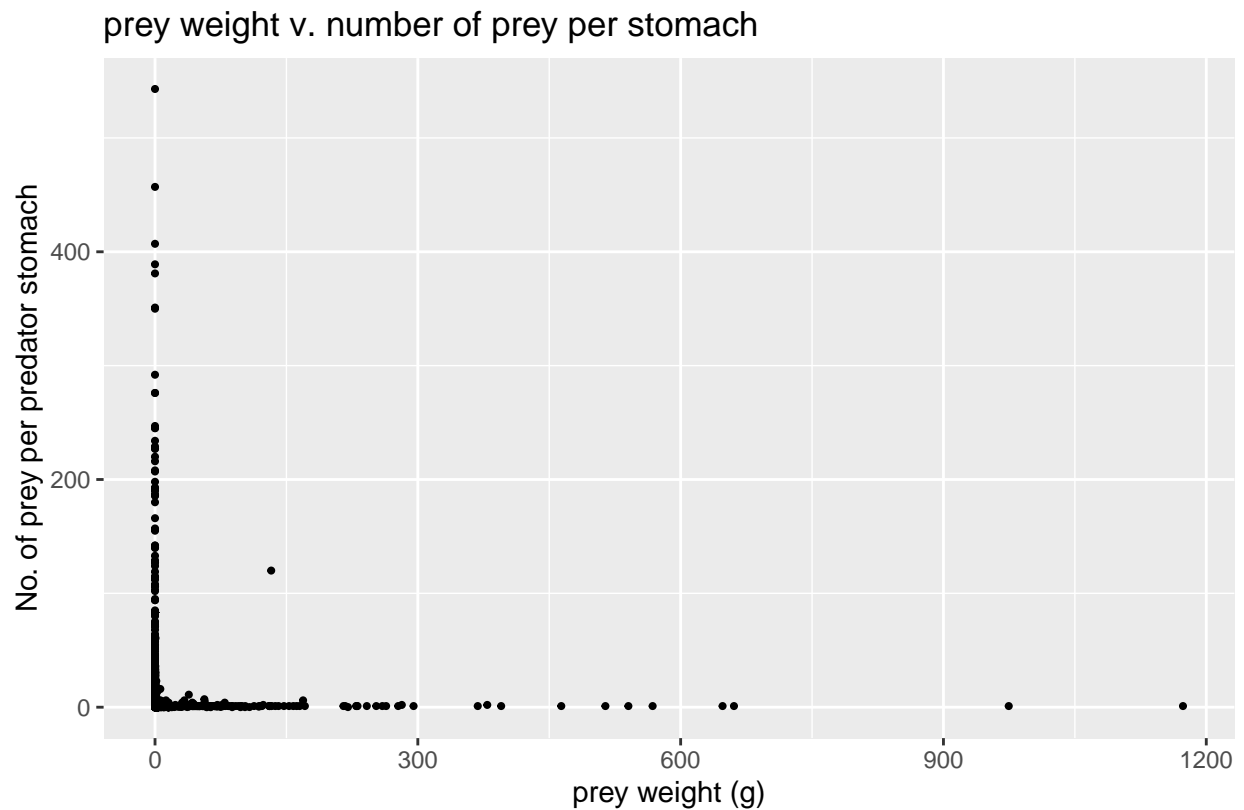


7.11

2022-10-27

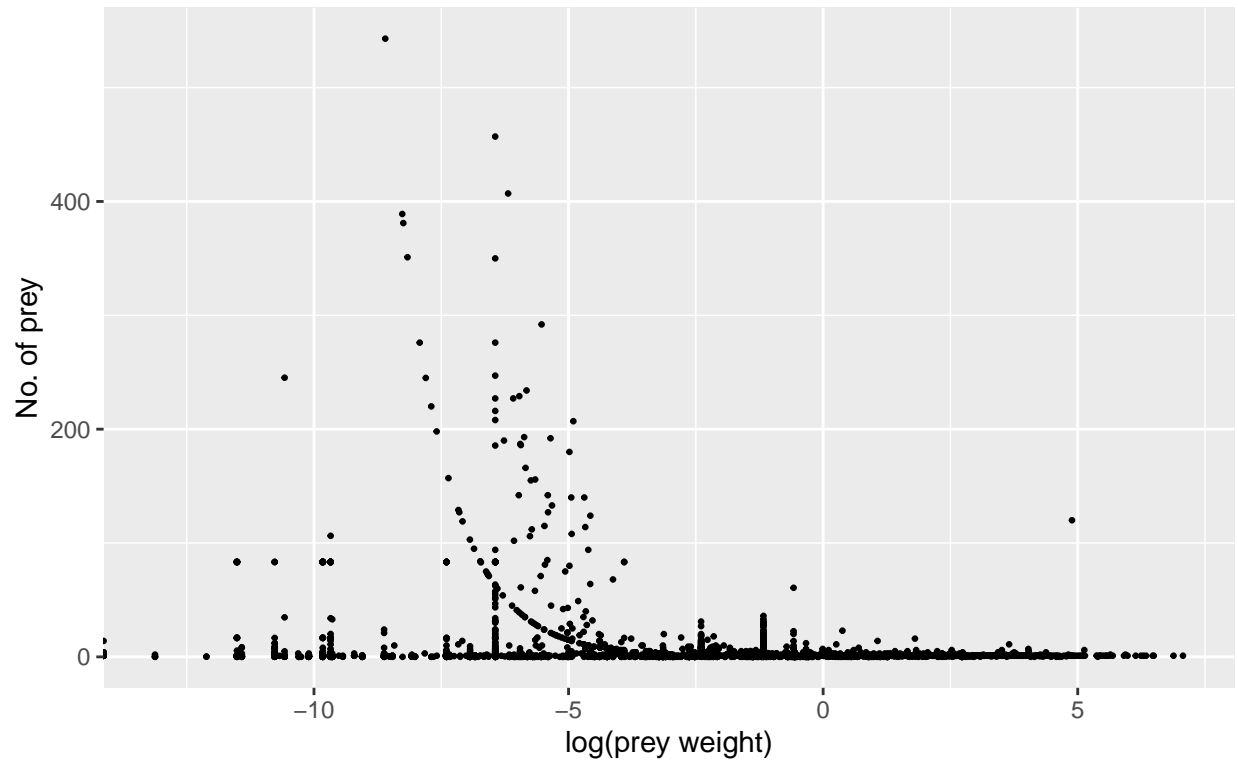
```
###prey weight v. number density of prey
```



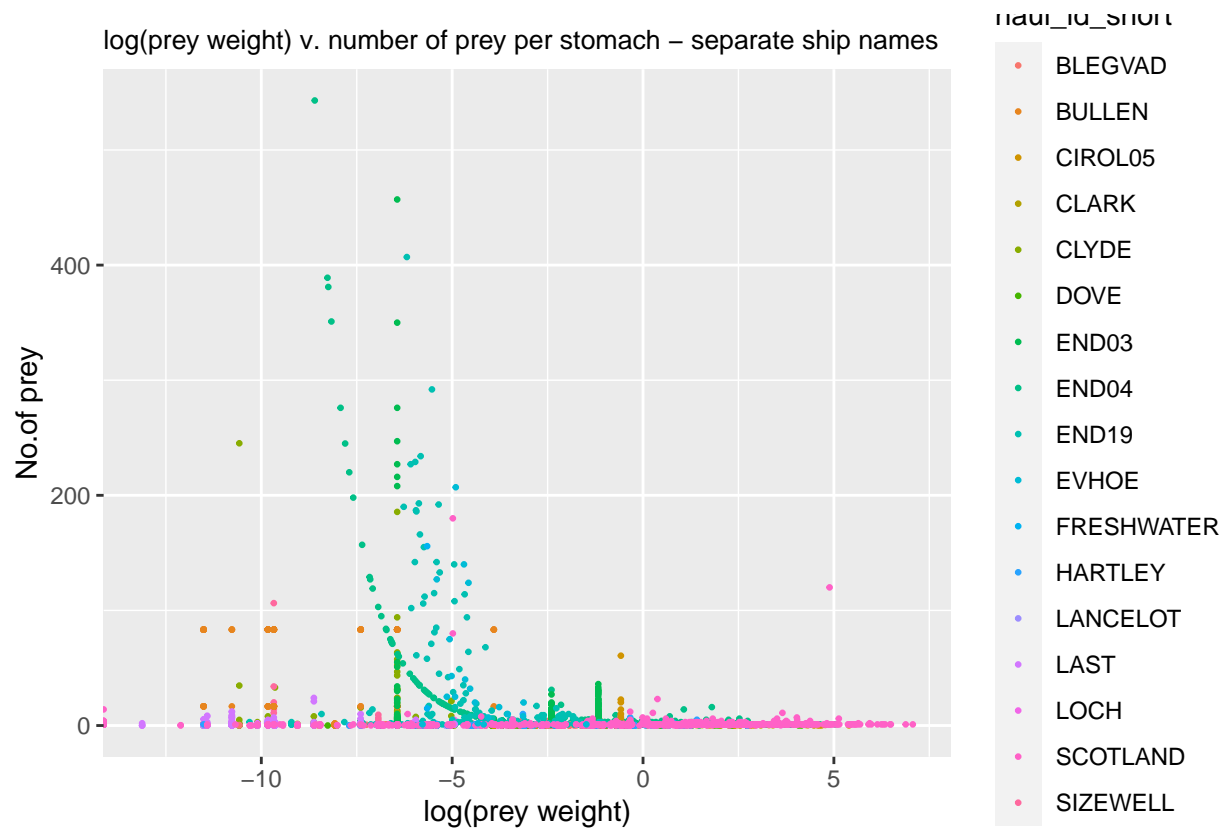
Playing around with data to see any specific correlations; what is the distribution of the weight of prey recorded

```
## [1] "Playing around with data to see any specific correlations; what is the distribution of the weight of prey recorded"
```

log(pre y weight) v. number of prey per predator stomach

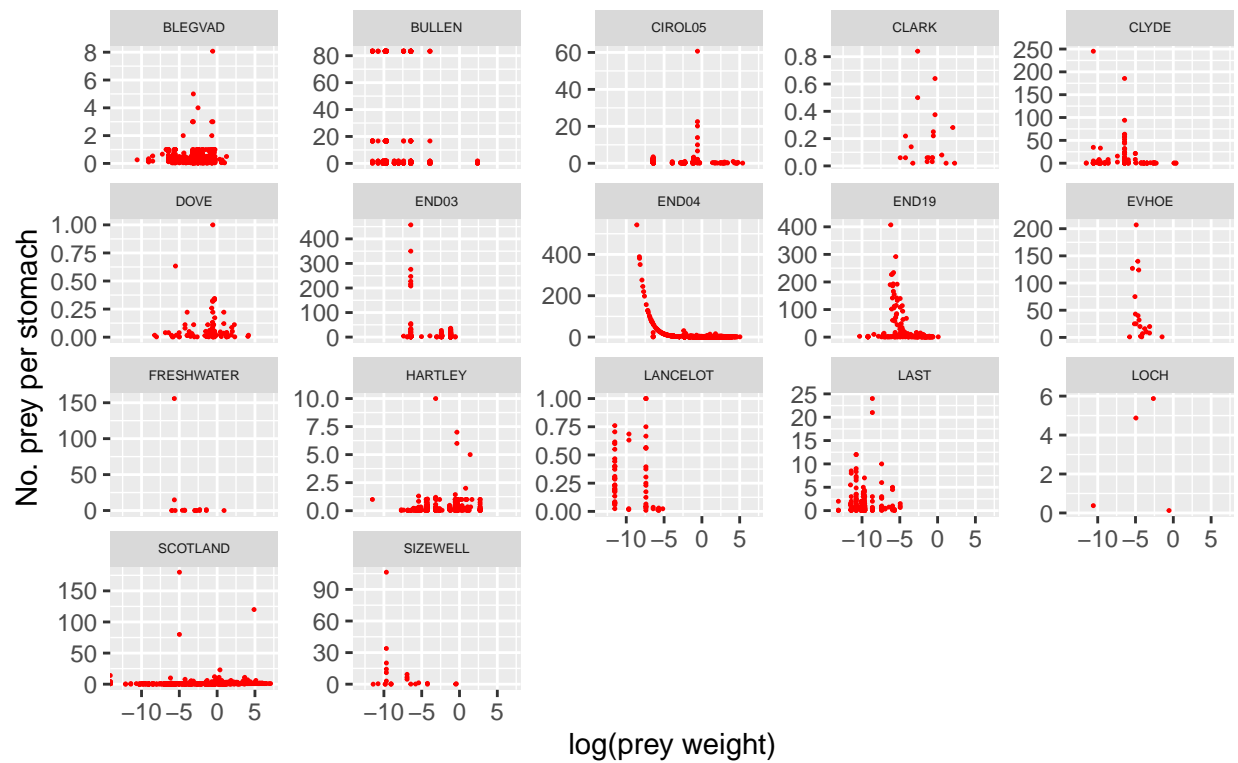


Identifying any 'interesting' looking outputs



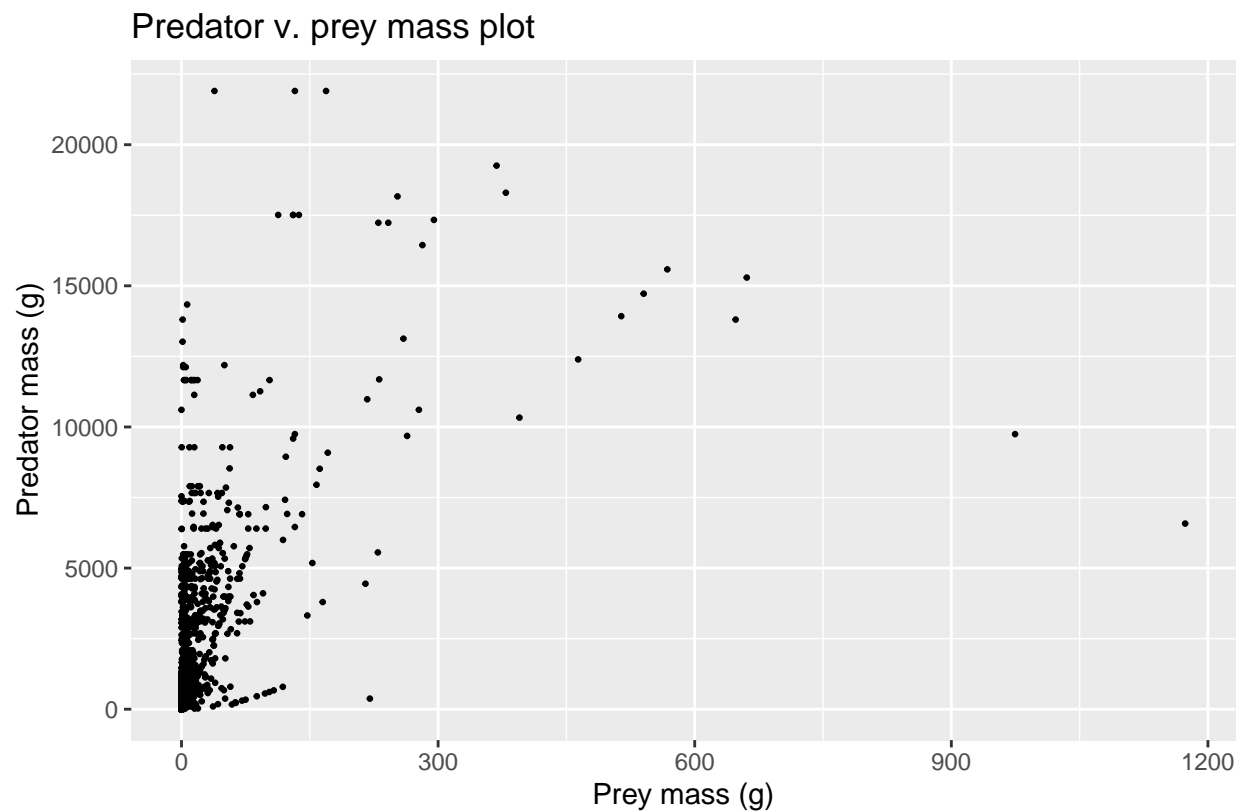
is they were sampled by; shows data lying on a surprsingly nice curve for one of the boats

log(pre y weight) v. number of prey per stomach



· END04, lots of observations for single weights for LANCELOT; lots of the same no. of fish observations for BULLEN

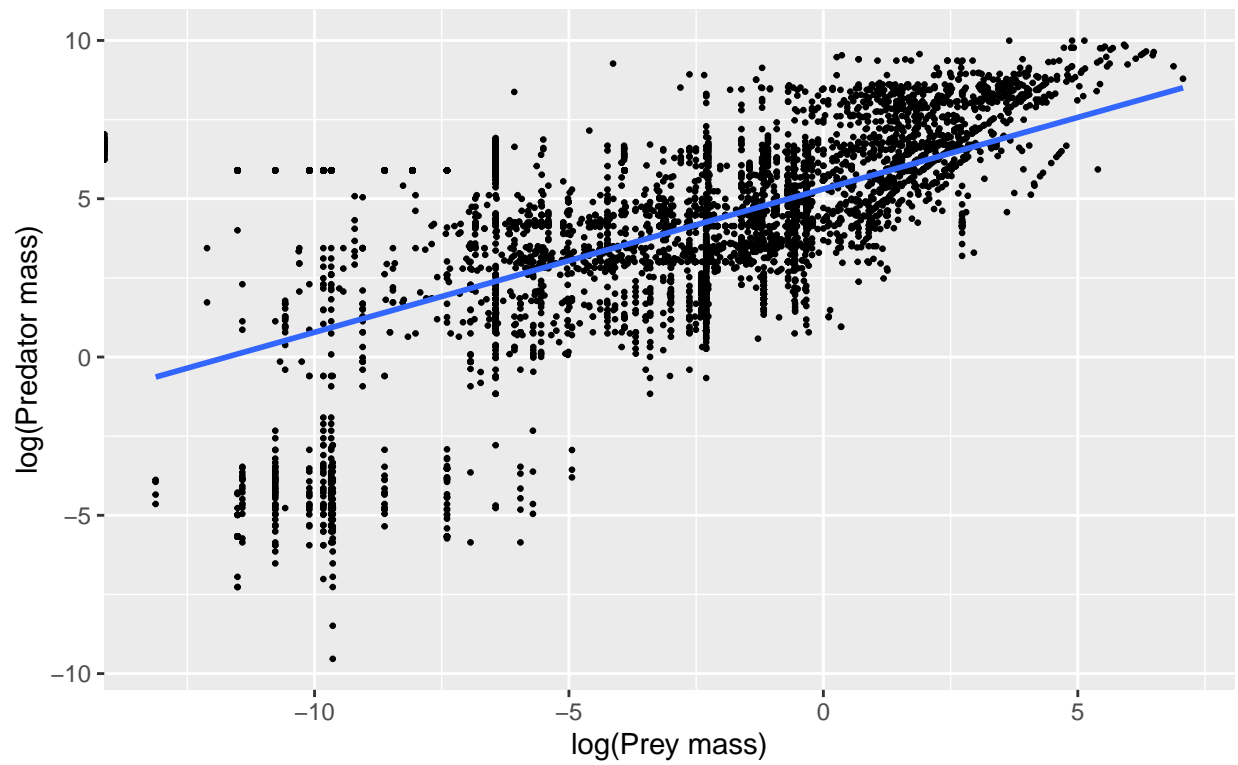
```
###prey weight v. pred weight
```



Attempting to find a link between the predator mass and the prey mass

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

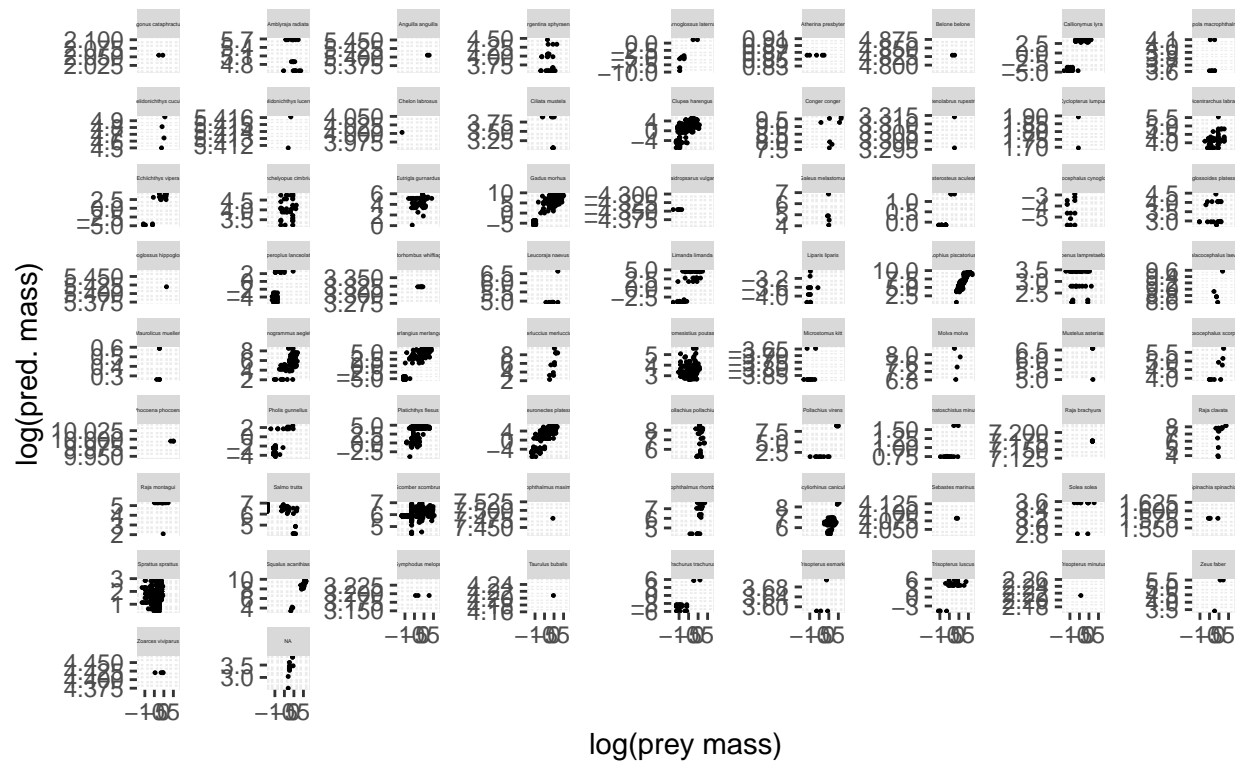
log(Predator mass) v. log(preyn mass) plot



Using log() to see proportionality of the axes, slope of added line should = PPMR

```
##      (Intercept) log(preyn_weight_fixed)
##      5.3070319      0.4525842
```

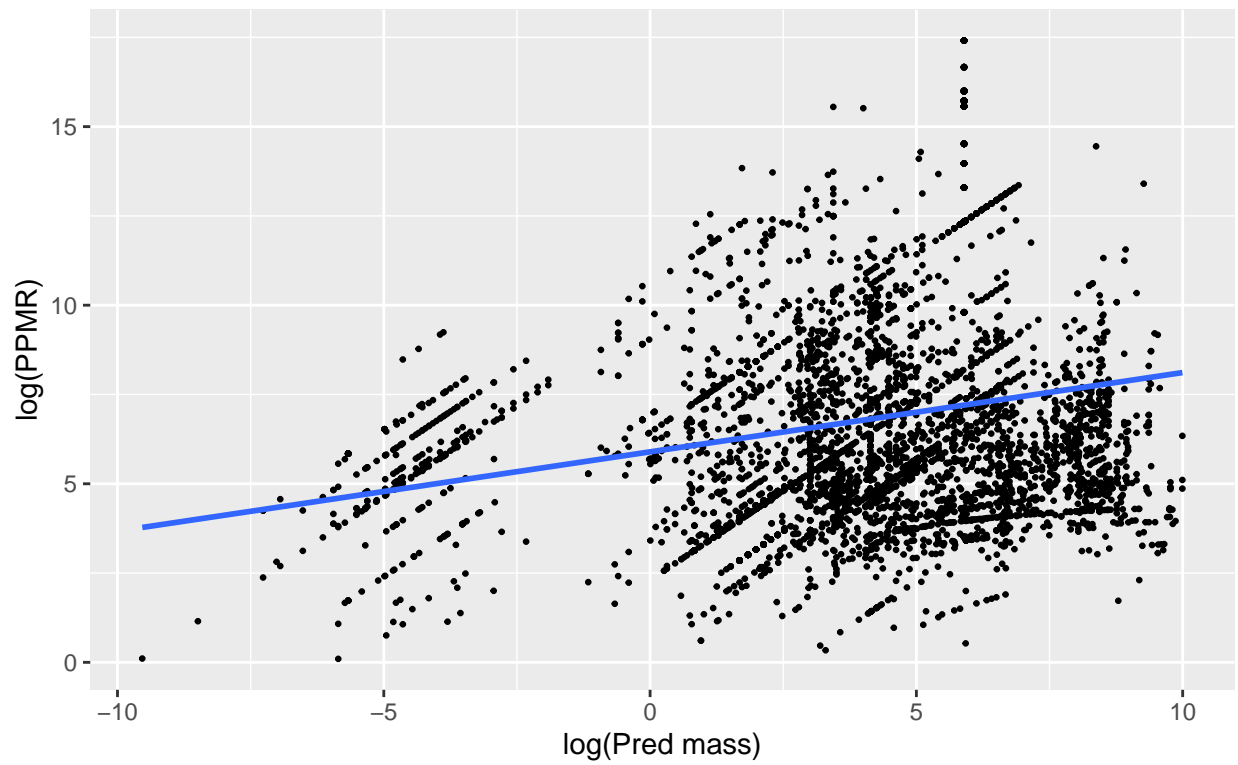
log(pred. mass) v. log(pre prey mass) separated by predator species



pe should intersect the y-axis at 0, else our idea for PPMR calculation (pred mass is prop. to prey mass) is incorrect.

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


log(pred mass) v. log(ppmr) plot

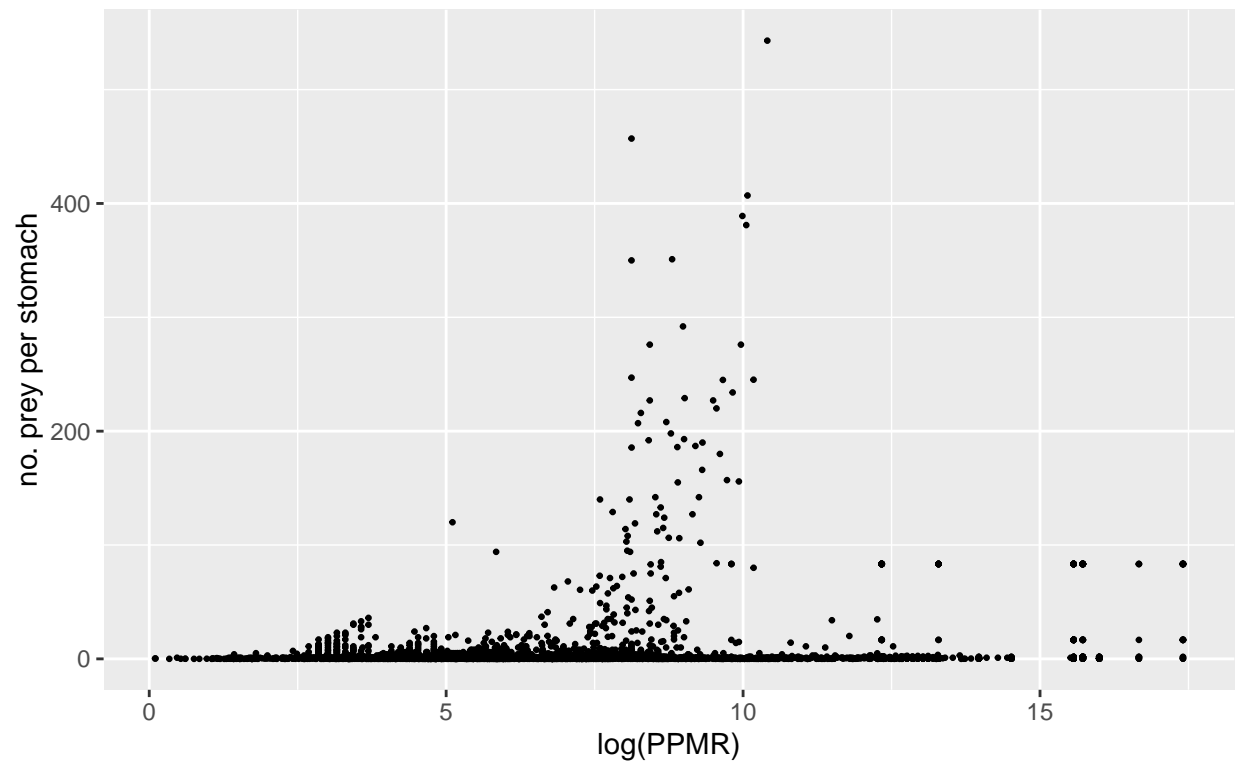


The slope is not =1, so the PPMR is indept. of pred. mass (as desired)

```
##      (Intercept) log(pred_weight_fixed)
##      -8.802959e-14      1.000000e+00
```

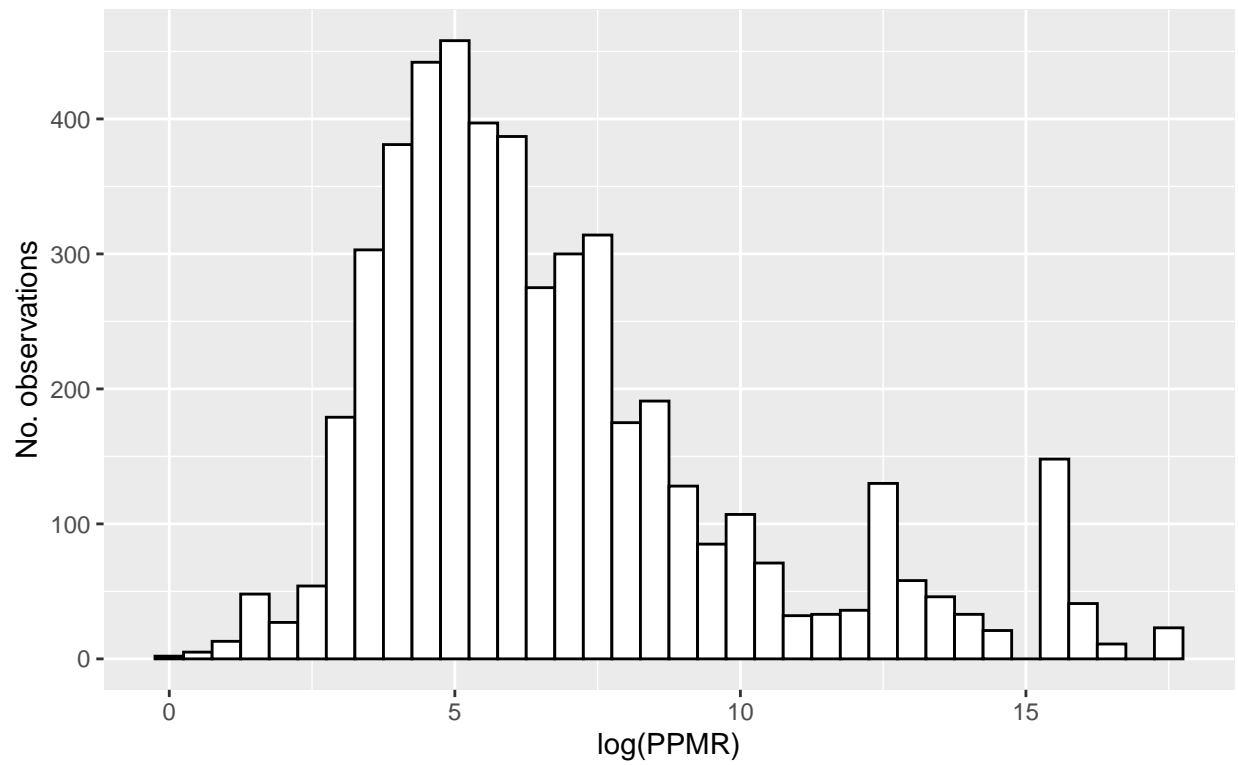
###log(PPMR) v. number density of prey

Scatter plot: log(PPMR) v. no. of prey per stomach



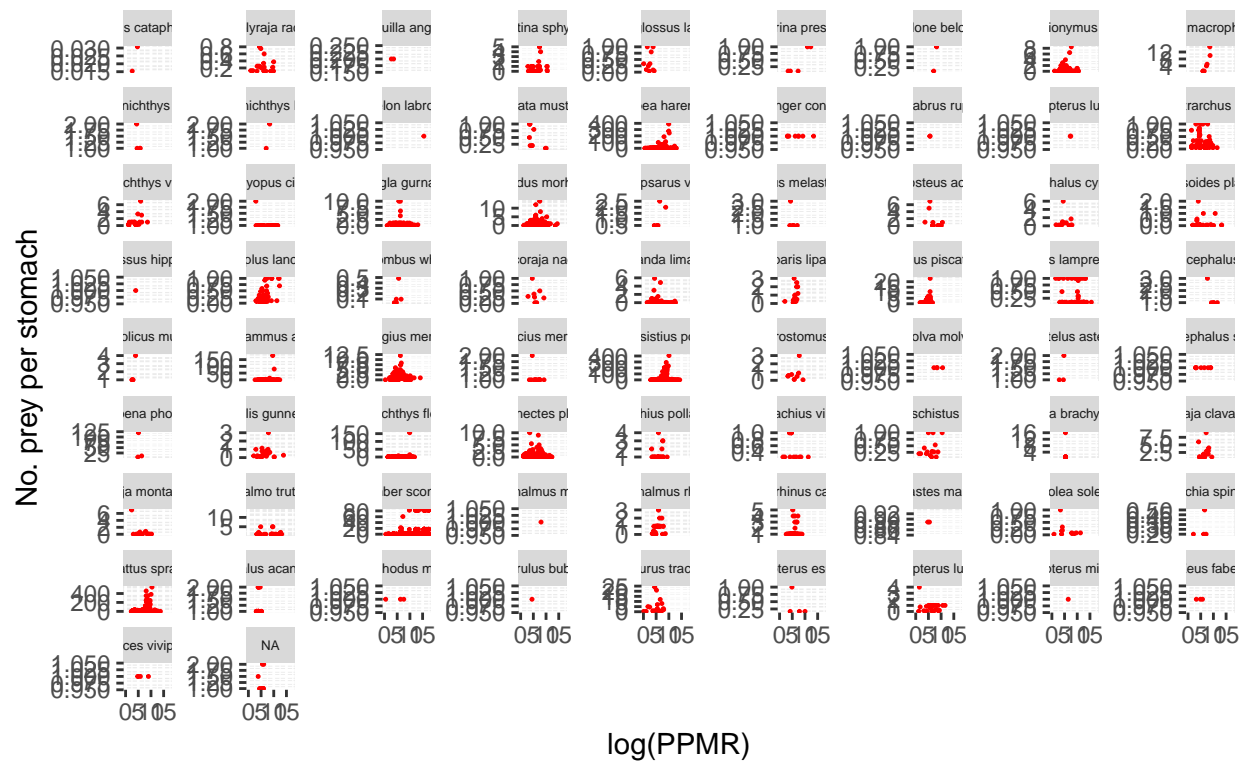
Trying to find the most common PPMR over all the fish

Histogram: $\log(\text{PPMR})$ v. number of observations



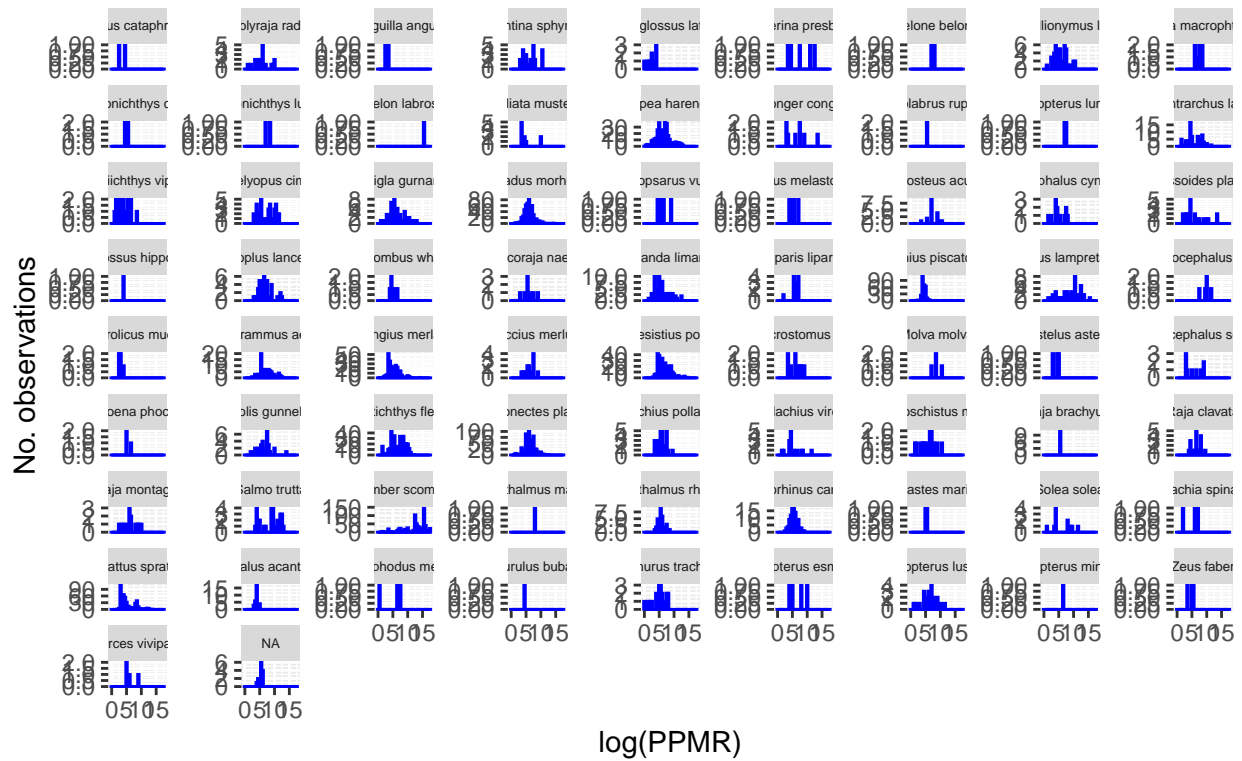
ervation for each value of $\log(\text{PPMR})$, i.e. seeing more clearly what the most common PPMR is across all fish species

Scatter plot: log(PPMR) v. number density of prey separated by species



looking for the most common PPMR for each individual species

Histogram: log(PPMR) v. number of observations, separated by species



most common PPMR per species in a clearer way – the most common should be the one with the single largest bar

Histogram: log(PPMR) v. no. of observations: *Clupea harengus*

