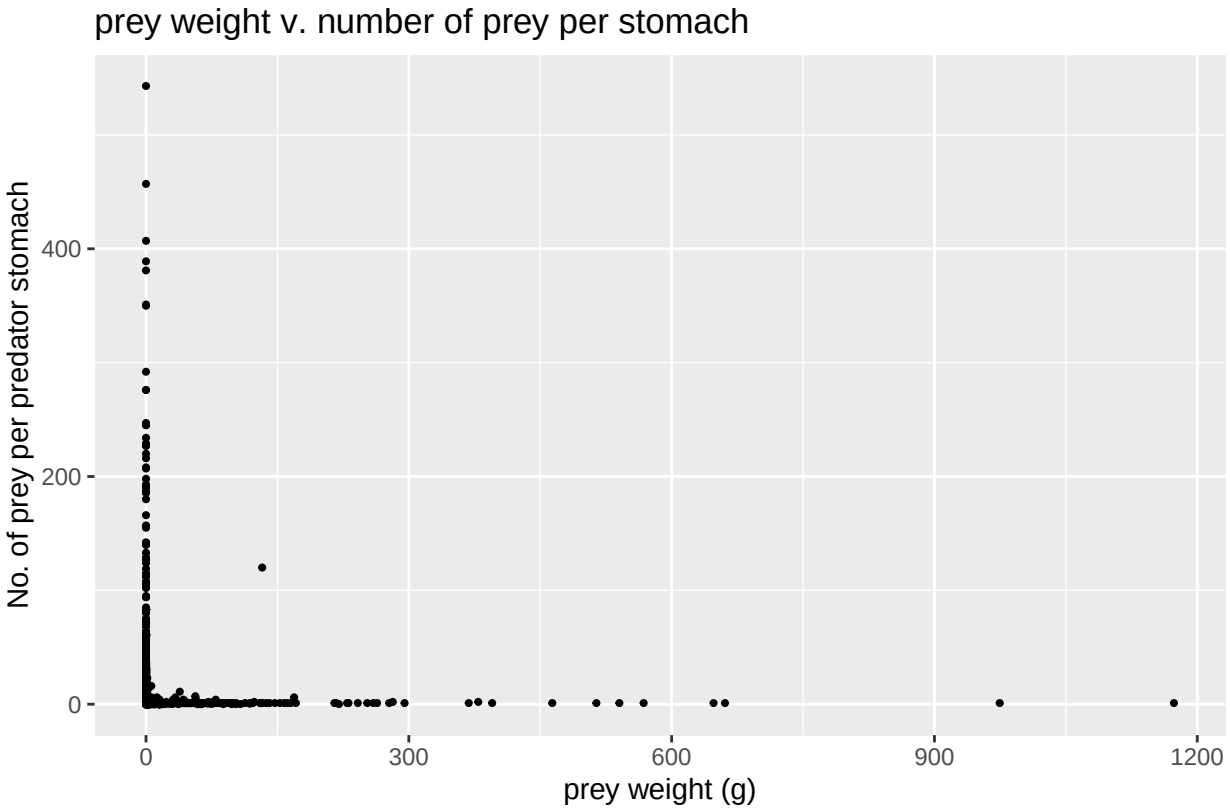
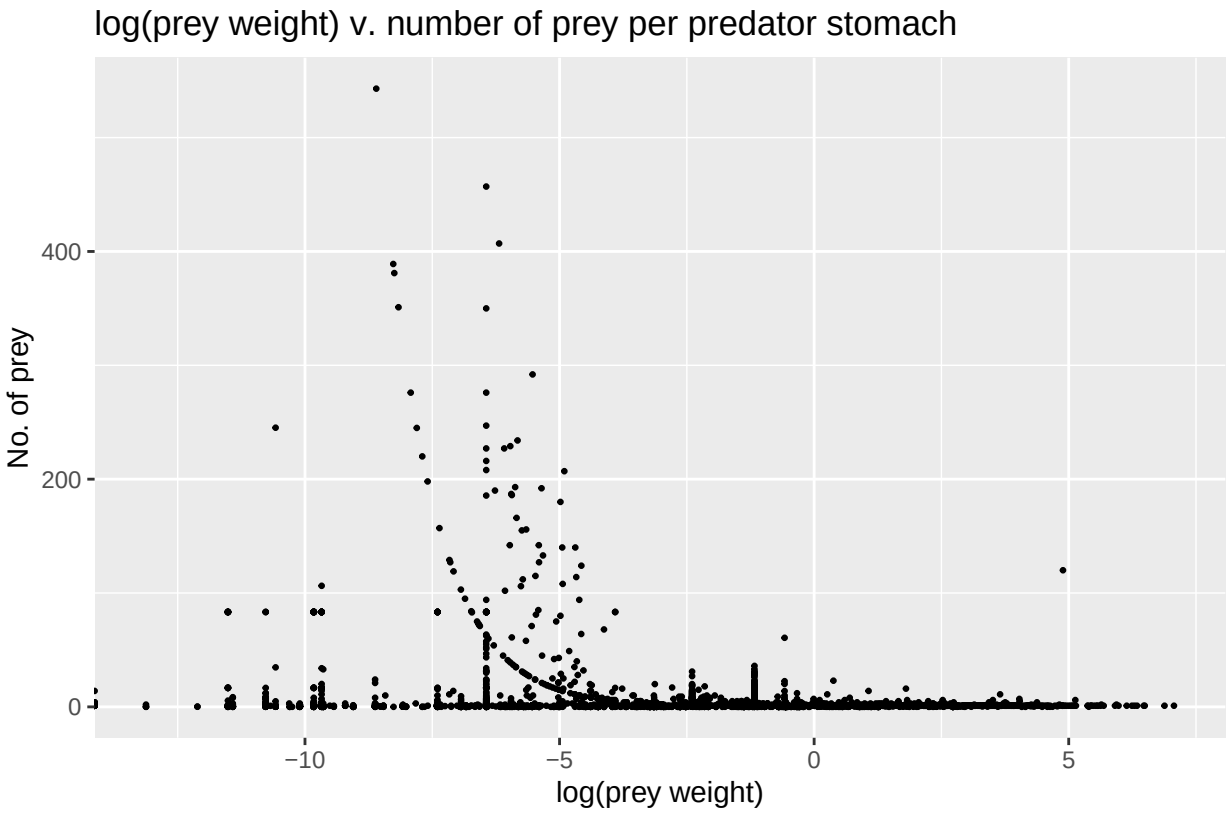
2.11

2022-10-27

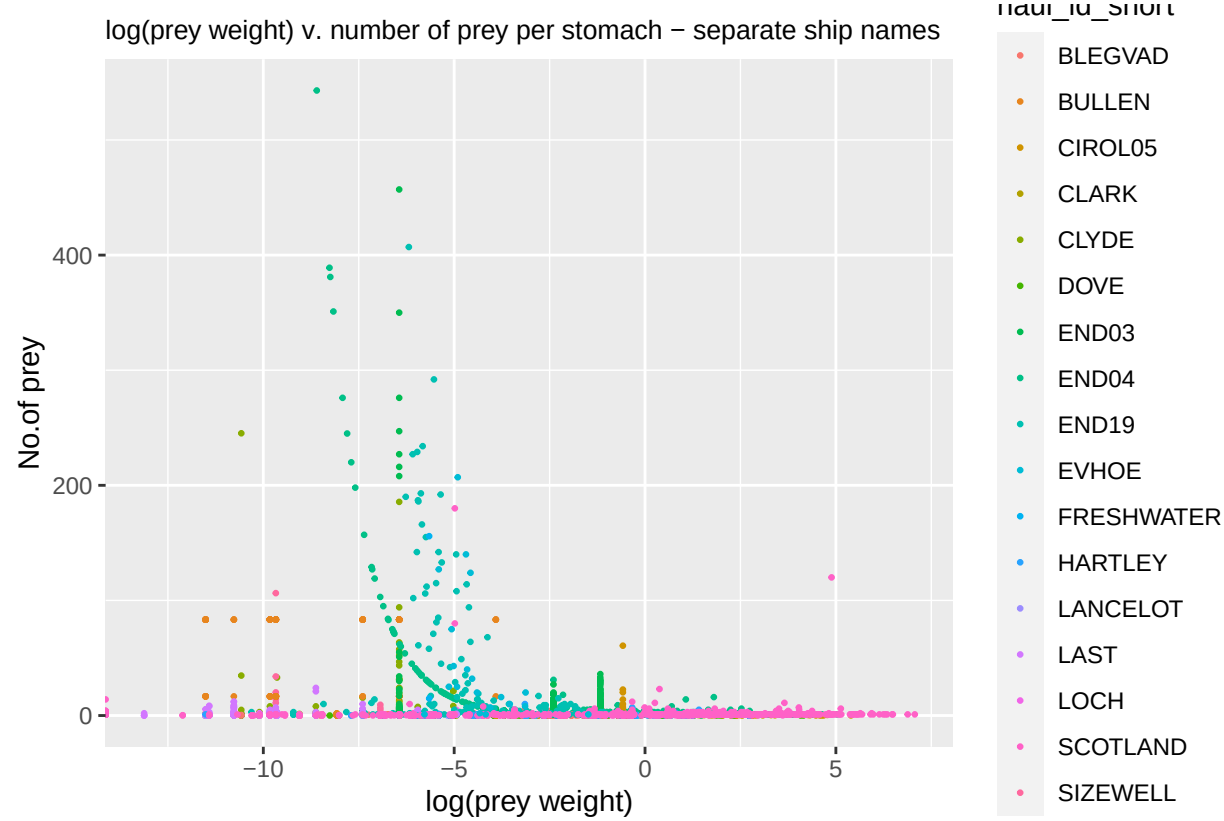
###prey weight v. number density of prey



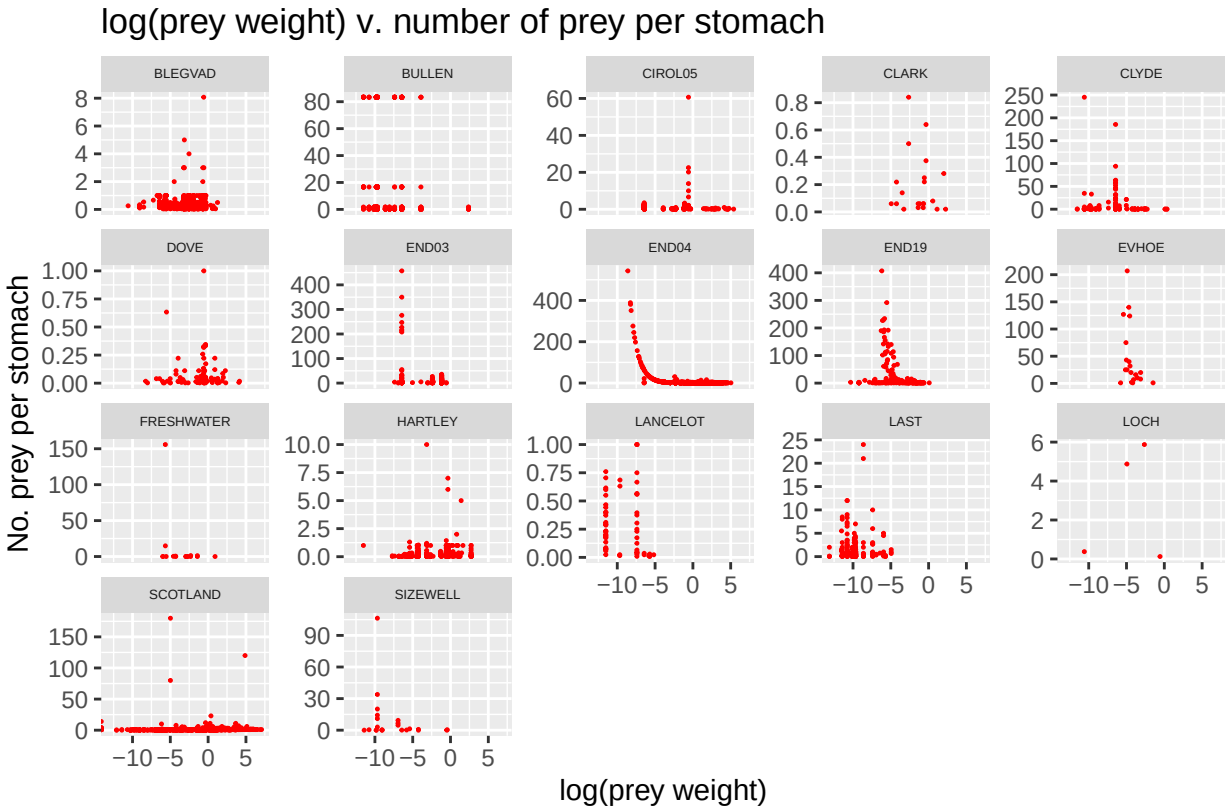
Playing around with data to see any specific correlations; what is the distribution of the weight of prey recorded



Identifying any 'interesting' looking outputs

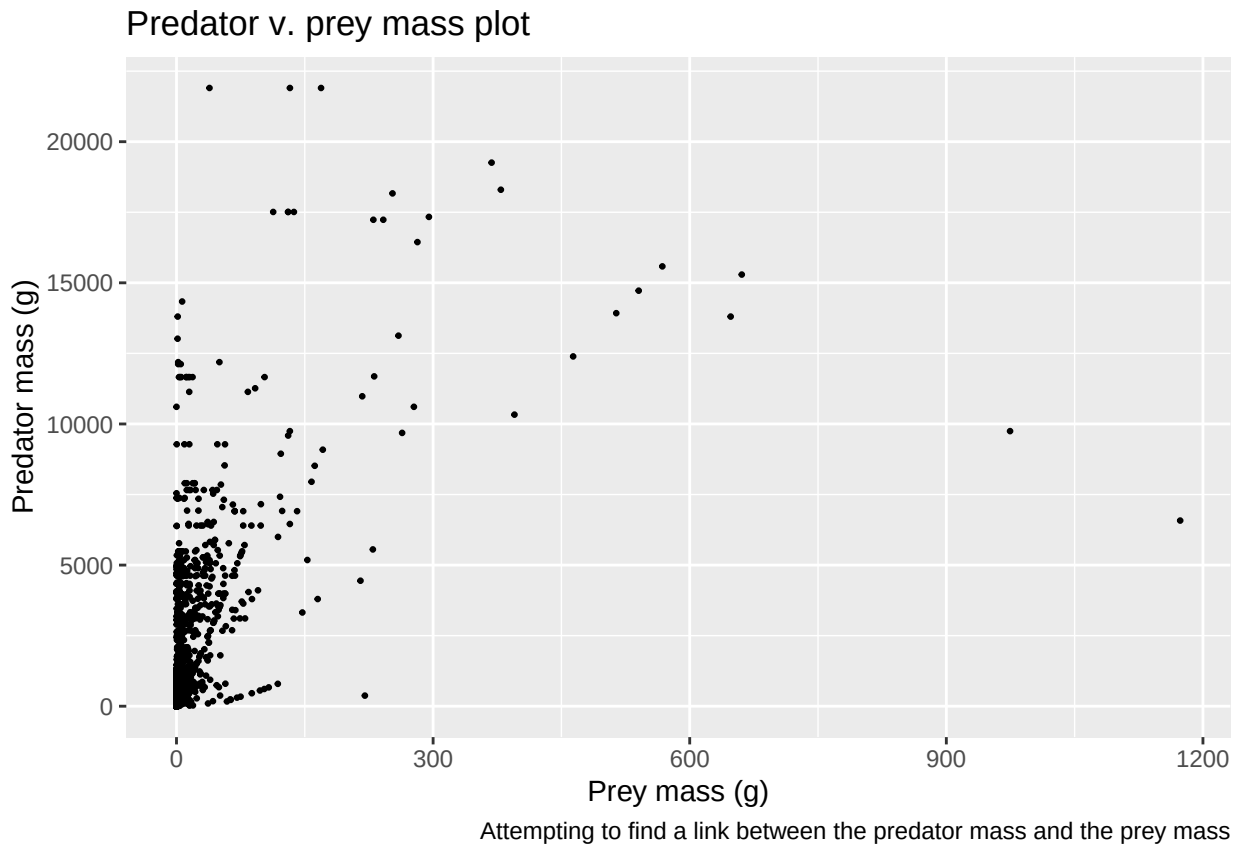


ts they were sampled by; shows data lying on a surprsingly nice curve for one of the boats

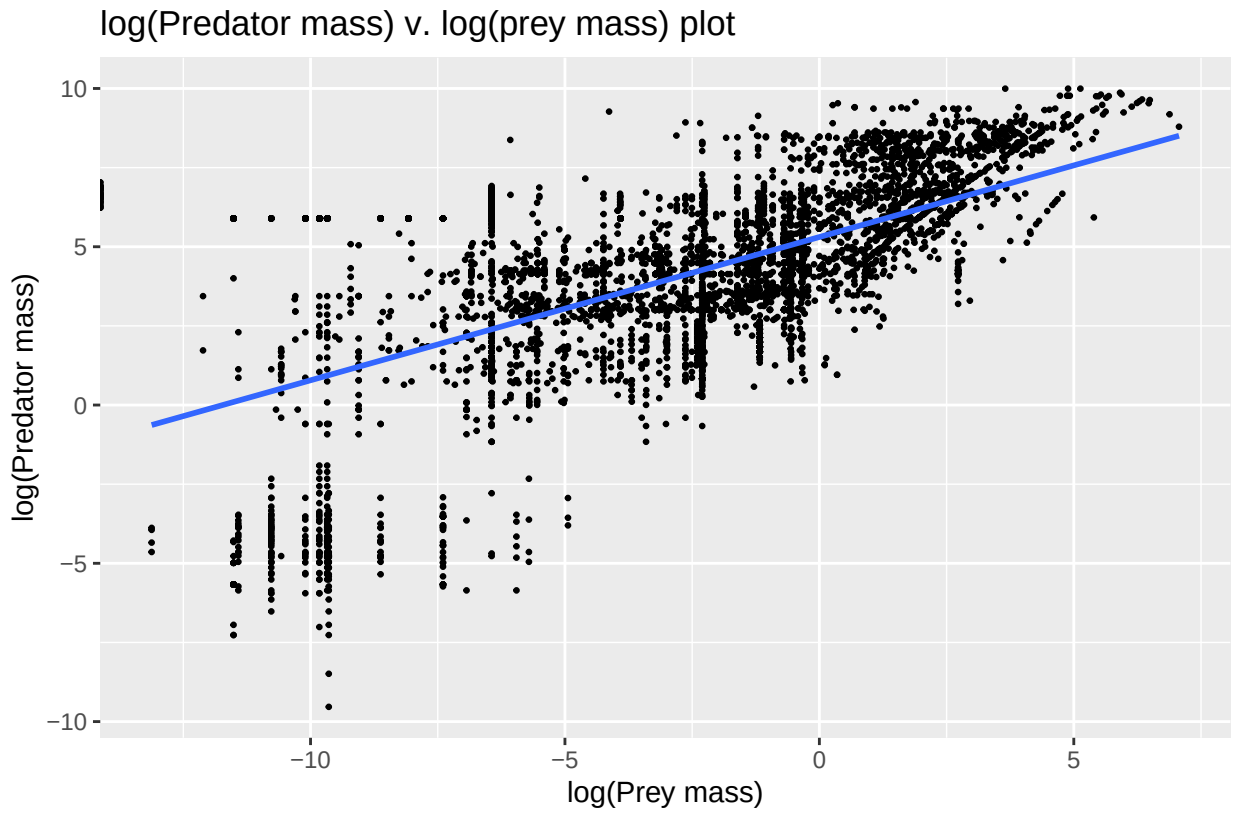


· END04, lots of observations for single weights for LANCELOT; lots of the same no. of fish observations for BULLEN

###prey weight v. pred weight



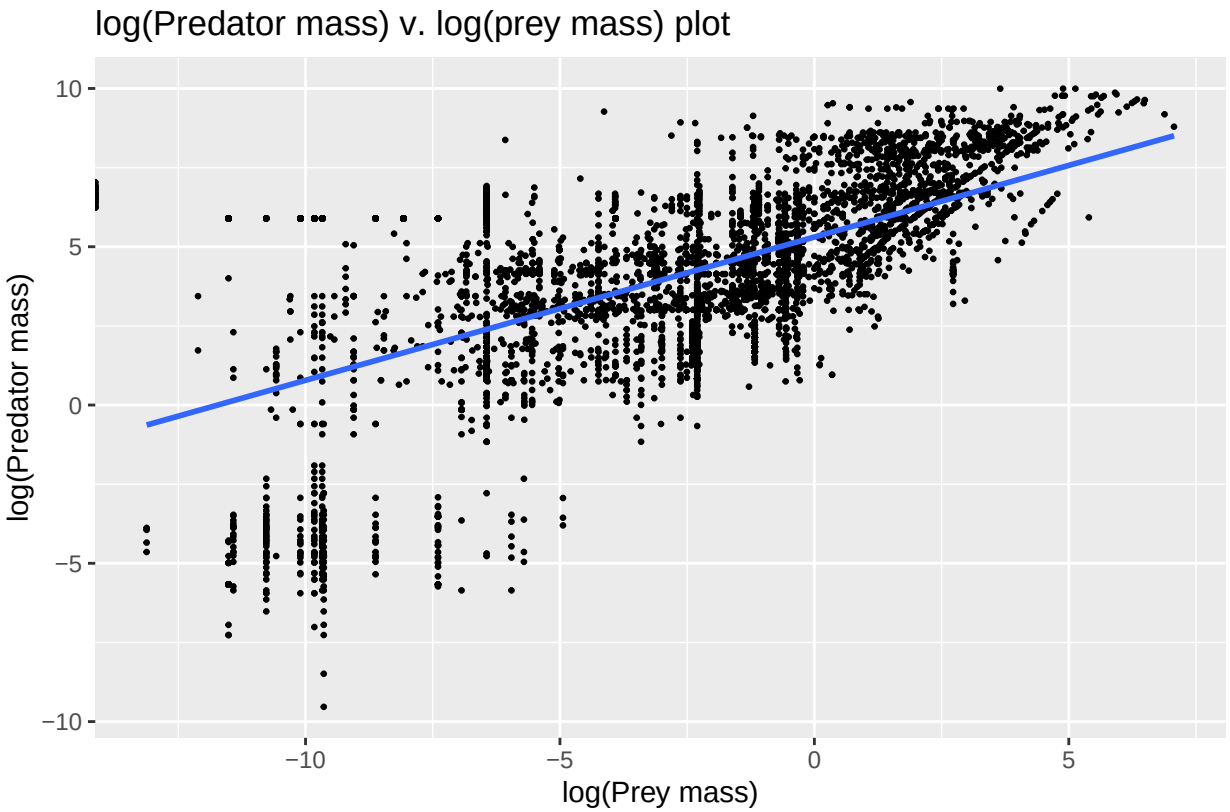

```
## `geom_smooth()` using formula 'y ~ x'
```



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

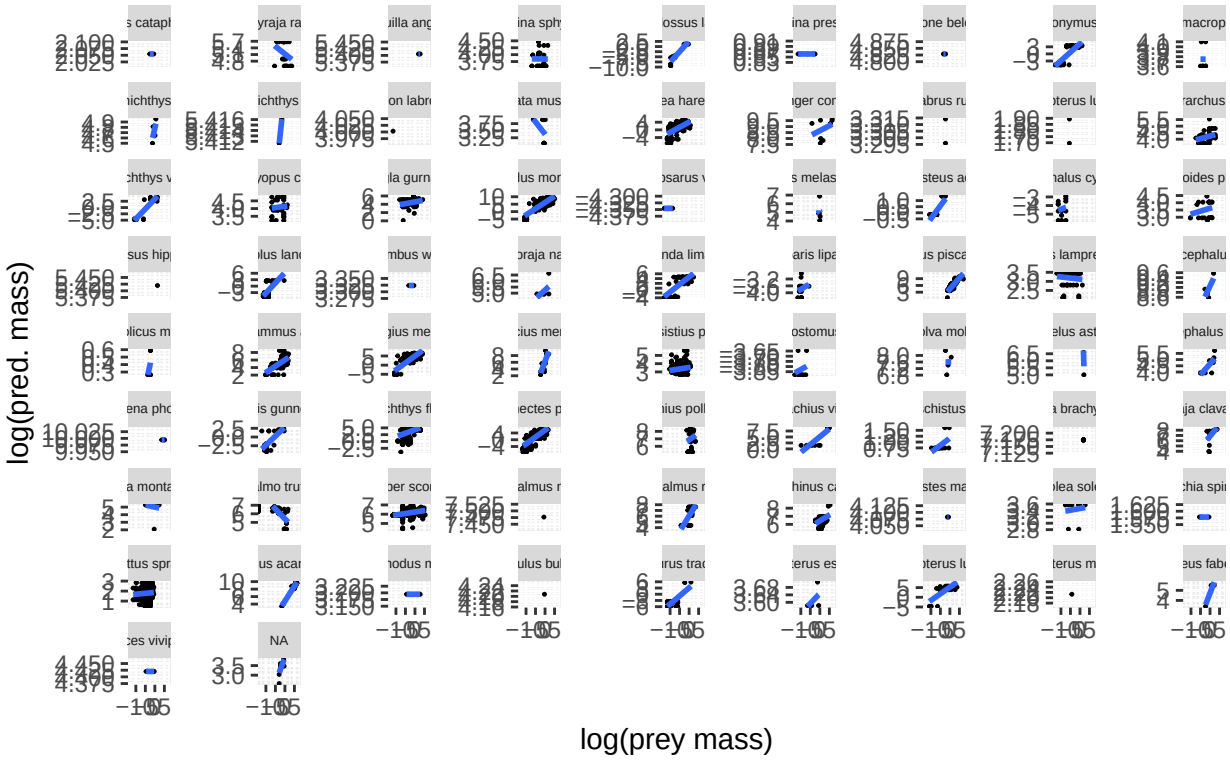
```
##             (Intercept) log(prey_weight_fixed)
##               5.3070319              0.4525842
```

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



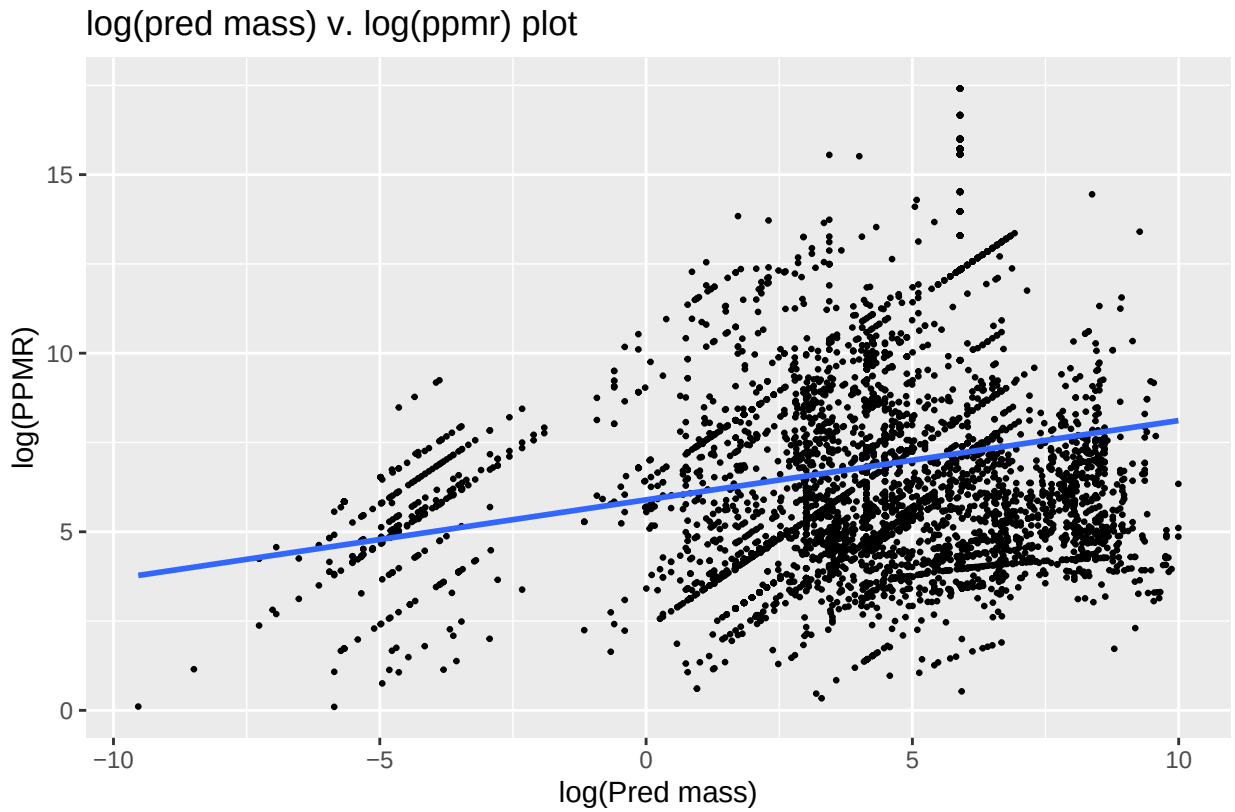
Using log() to see proportionality of the axes, slope of added line should = PPMR

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



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

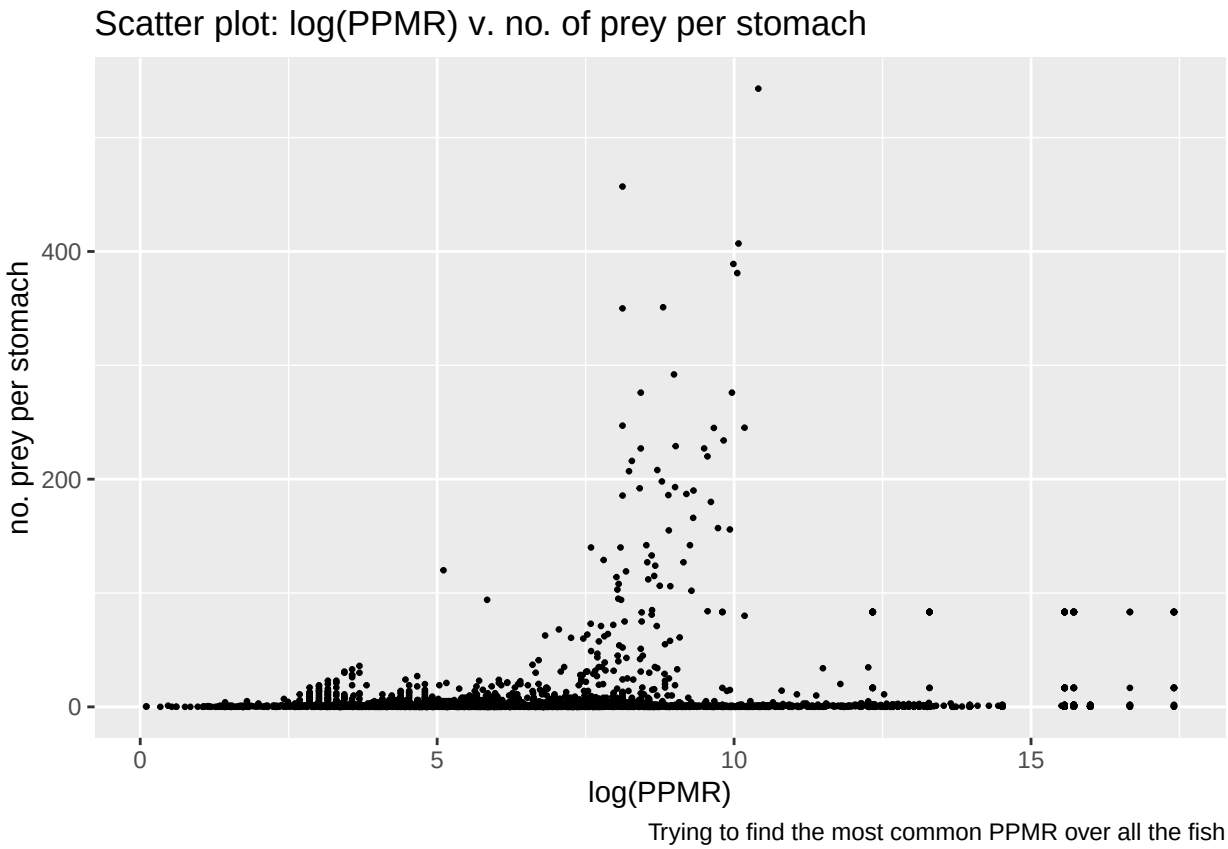
```
## `geom_smooth()` using formula 'y ~ x'
```

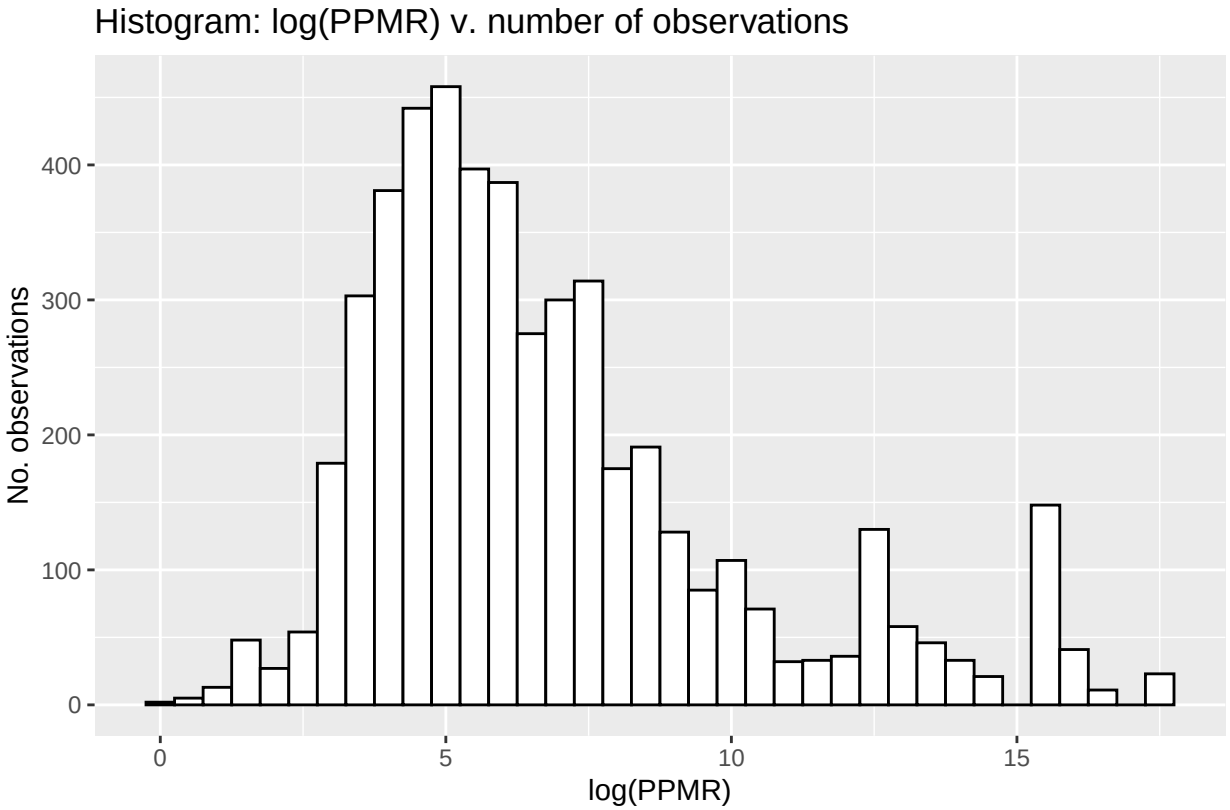


The slope is not =1, so the PPMR is indept. of pred. mass (as desired)

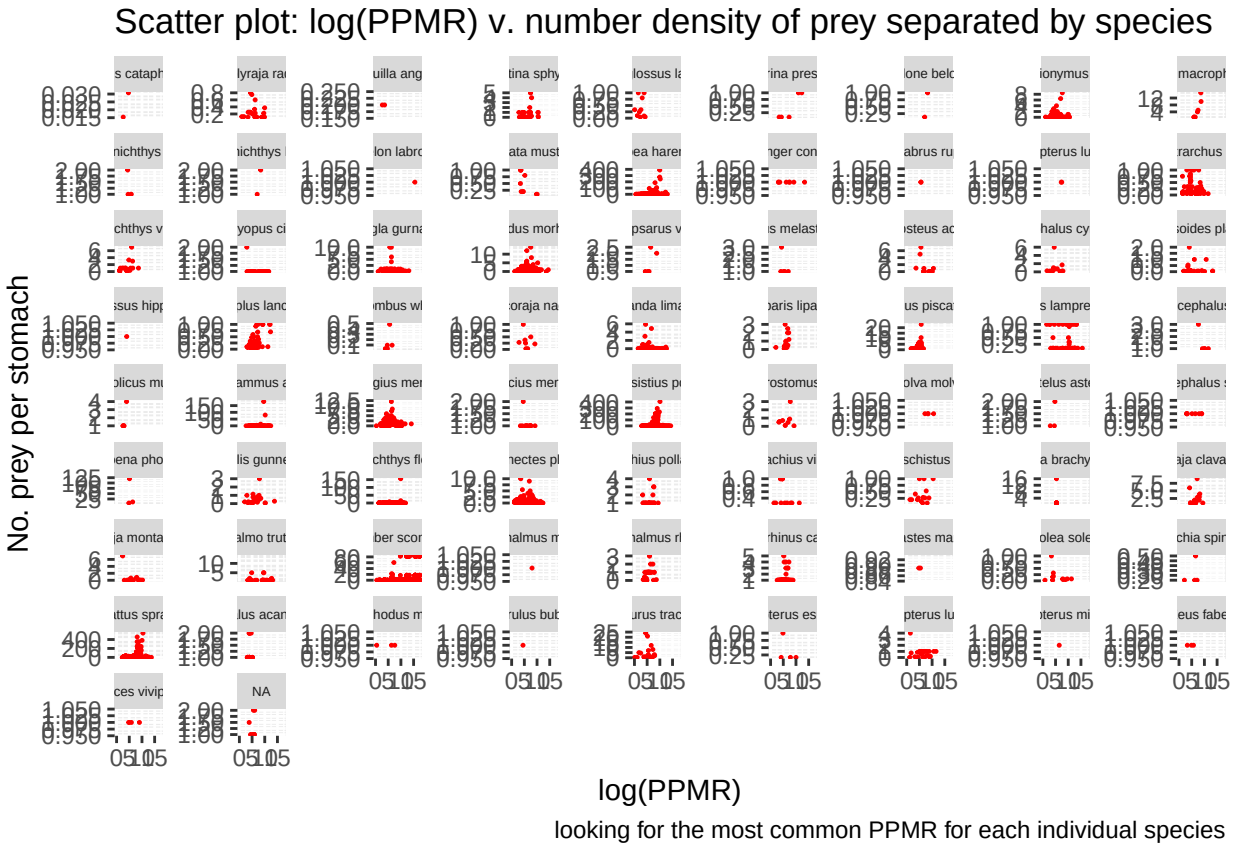
```
##           (Intercept) log(pred_weight_fixed)
##         -8.802959e-14           1.000000e+00
```

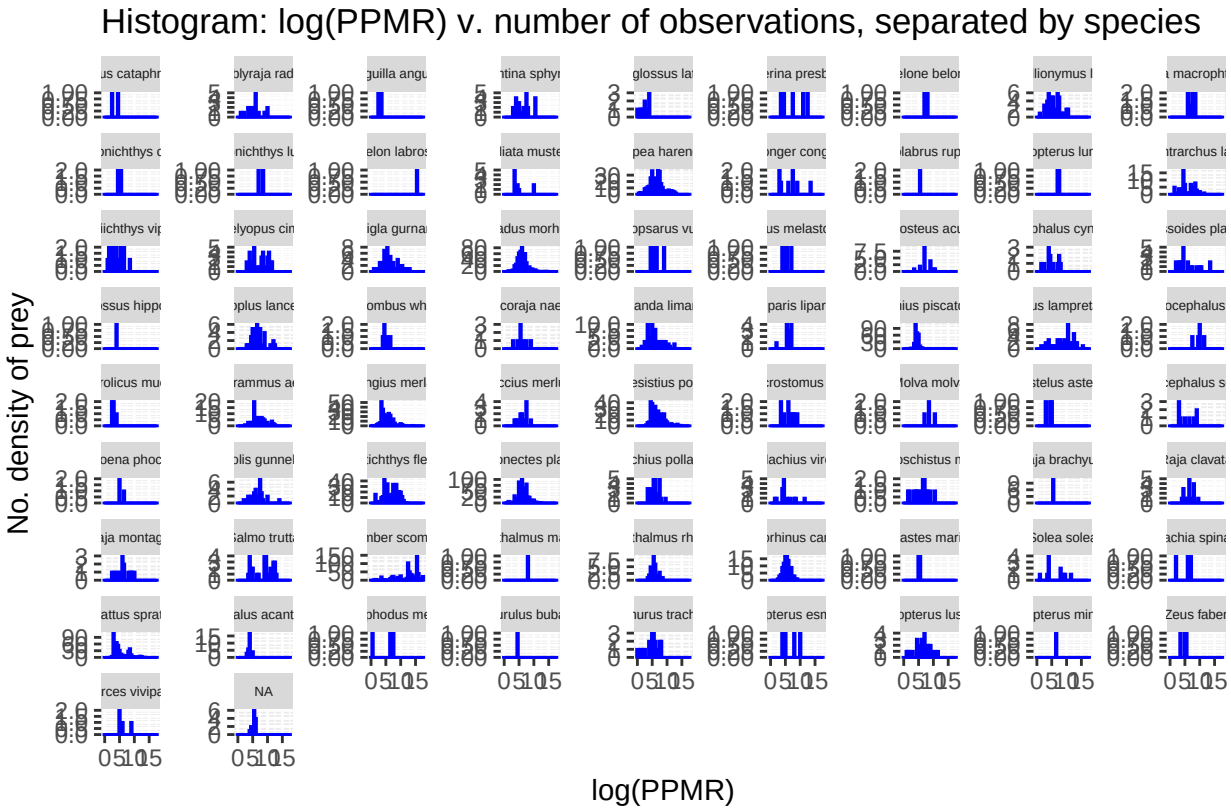
###log(PPMR) v. number density of prey


Scatter plot: log(PPMR) v. no. of prey per stomach
no. prey per stomach
400
200
0
0
5
10
15
log(PPMR)
Trying to find the most common PPMR over all the fish

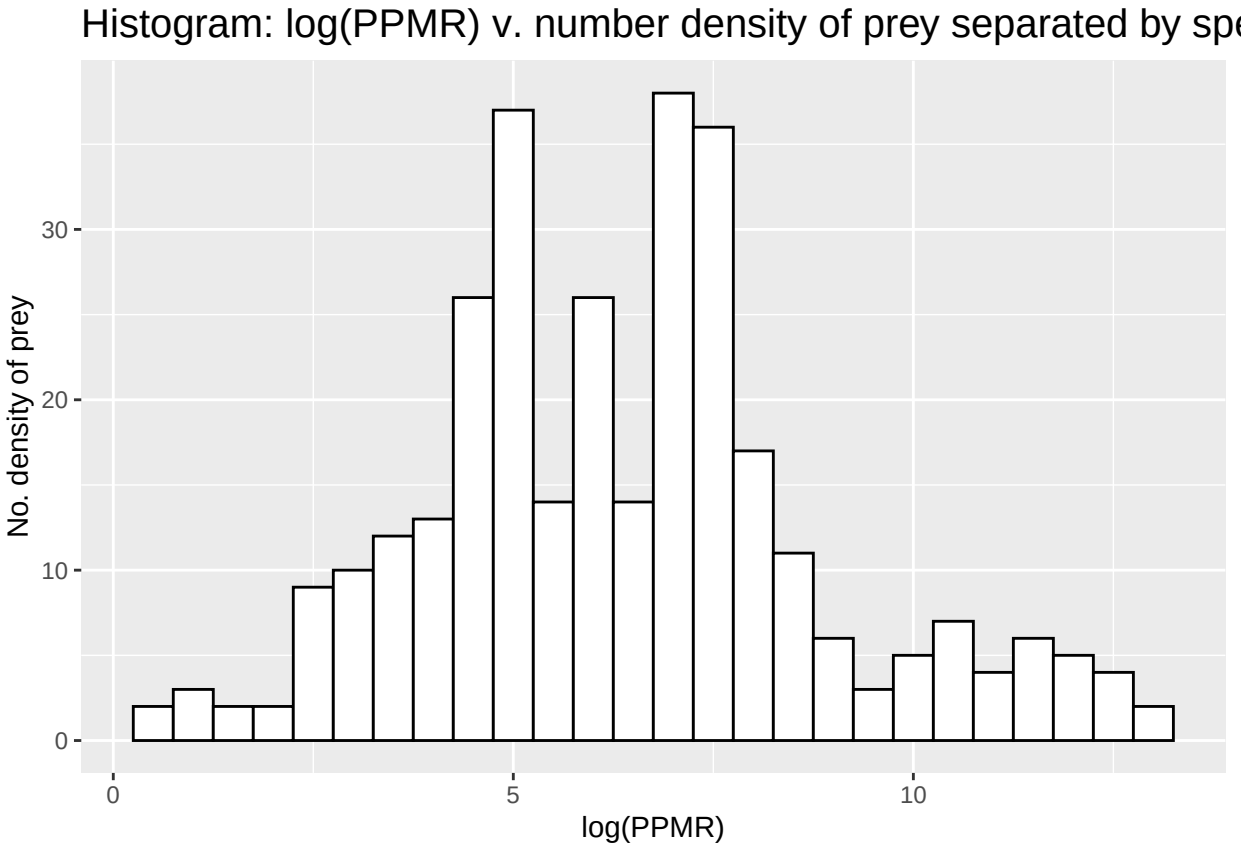


rvation for each value of log(PPMR), i.e. seeing more clearly what the most common PPMR is across all fish species


Scatter plot: log(PPMR) v. number density of prey separated by species
No. prey per stomach
log(PPMR)
looking for the most common PPMR for each individual 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. number density of prey separated by spe
No. density of prey
0
10
20
30
0
5
10
log(PPMR)