# Plot Instructions from data frame FrGrps.Rdata

Below is the code I wrote to get the graph below that. I’ll explain what I need to keep from this plot, and what I want to be different. You don’t have to use this code as I have written it as long as the end result is what I need, and I can understand what you did.

FYI, this plot is still for exploratory purposes, not for final documents.

## What to keep

1. The x-axis is the column, group\_size, and the y-axis is FrmnCpm. (I’d like a second identical plot with group\_size on the x-axis and FrmnBpm on the y-axis, see below.)
2. The y-axis needs to be in log 10 scale since the numbers range from very small to very large.
3. I used facet-wrap because I need each of the 6 different “events” to have their own plot.
4. The x-axis labels should be at that angle and font size so they’re legible.
5. I tried to get it to make the numbers that fall below zero a different color, and don’t know why it didn’t work.

## What else I need

1. One plot with FrmnCpm on the y-axis and a second plot with FrmnBpm on the y-axis.
2. Can you make the y-axis numbers that fall below zero a different color from the ones above zero?
3. I noticed some of the FrmnCpm numbers that are negative, such as event WLD2, group\_size CenDiaSm, are negative numbers but don’t show up on the plot. Do you know why and how to fix it?
4. Can you make visible the y-axis numbers that are zero?
5. They y-axis numbers should be shown as whole numbers, not 1e+03, etc.
6. The colors can remain that pink (looks orange to me) and cyan.
7. Shift the x-axis labels so that they are centered under the bars they go with.
8. Separate the six plots into individual plots, but only do that if it’s easy. Otherwise I will make separate dfs and plot them individually.

## Also,

1. Use ggplot/ggplot2, and not base R.
2. Give me the code so that I can tweak it as needed later.
3. Give me a pdf of the plot(s) you make.
4. If any of this is less than clear, please ask me questions!
5. If you have suggestions on how this data can be better presented, please let me know.

p <- ggplot(FrGrps, aes(x=group\_size, FRmnCpm))+

geom\_bar(stat = "identity", aes(fill = FRmnCpm <= 0))+

scale\_colour\_manual(name = "FRmnCpm", values = c('TRUE' = "pink", 'FALSE' = "cyan"))+

scale\_x\_discrete ("") +

scale\_y\_continuous(trans = "log10") +

theme(axis.text.x = element\_text(angle = 60, hjust = 0.8, vjust = 0.8, size = 12),

strip.text.x = element\_text(size = 14))+

facet\_wrap(~ event, ncol= 2, scales="free") +

xlab("Taxa Groups with Sizes") +

ylab("Feeding Rate, Counts per ml)

A picture containing calendar

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