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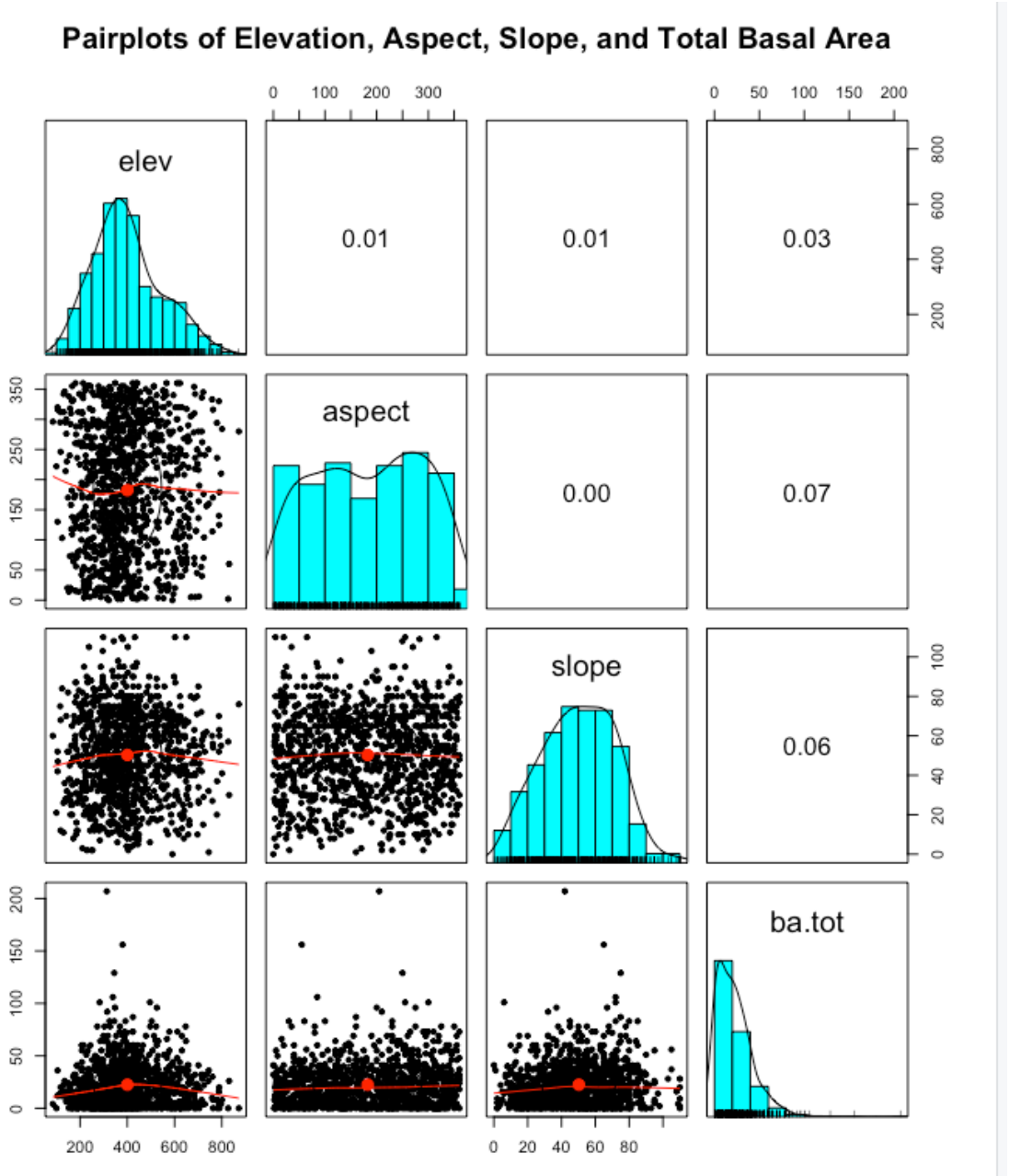
ECO 634
9/28/21

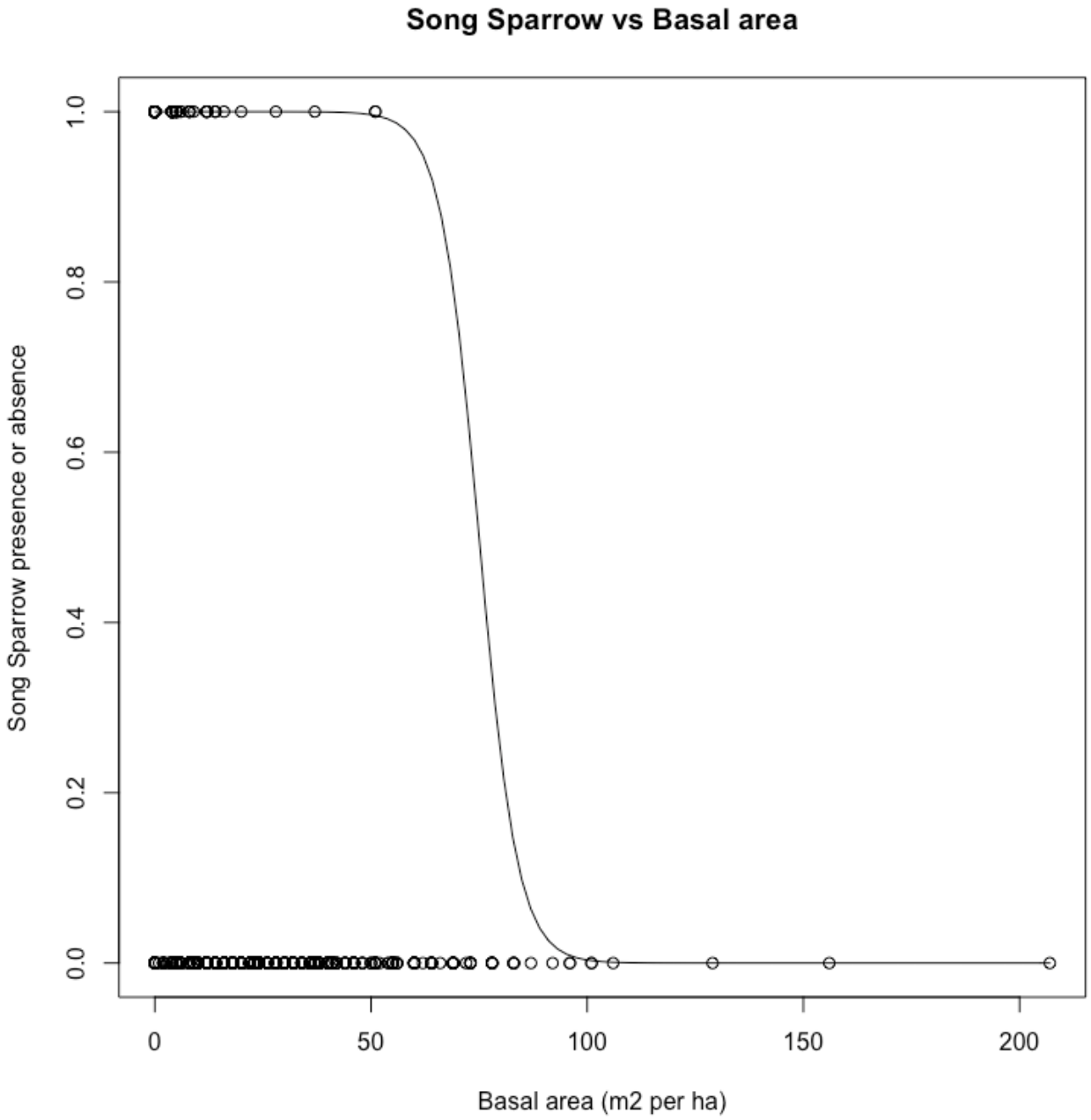
Lab 3

1. Basal area is the average amount of land area covered by trees, alive and dead or also known as the cross-sectional area of trees at breast height. It is a way to represent stand density and is measured in m2/hectare for this data.

2.

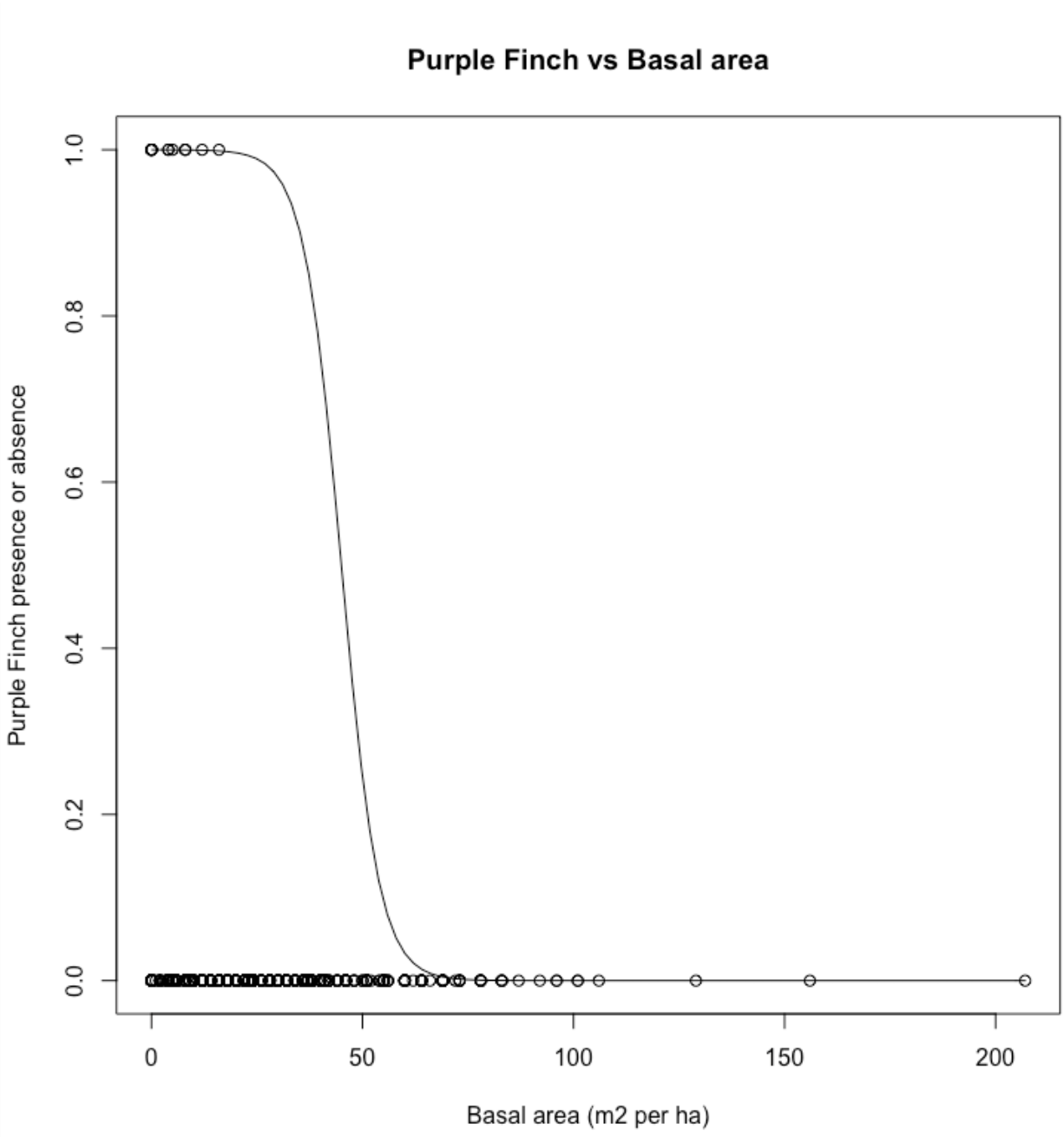


3.



4. The logistic function plot reveals that Song Sparrows prefers areas with low to medium basal cover. Song Sparrows are present when basal cover ranges from approximately 0-70 m2/ha and they become absent as tree cover becomes more dense. The logistic function fits the data points well and shows a steep decline as basal area approaches 70 m2/ha.

5.



6. The logistic function plot reveals that Purple Finch prefers areas with low to medium basal cover. Purple Finch are present when basal area ranges from approximately 0-40 m2/ha and they become absent as tree cover becomes more dense. The logistic function fits the data points well and shows a steep decline as basal area approaches 40 m2/ha.

7. There were 181 Gray Jays observed in all of the sampling sites.

8. sum(dat_all$GRJA)

9. There were 110 sampling sites in which Gray Jays were observed.

10. dat_all$GRJA>=1

    sum(dat_all$GRJA>=1)