LDP Project Manuscript: How does browse severity influence understory plants?

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1 Introduction

Different levels of moose browsing pressure can change plant community compositions (De Vriendt et al. 2021).

2 Methods

I used data from dryad (https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.3xsj3txdp). I calculated browse pressure (severity) by dividing the number of browsed twigs by the total number of twigs (proportion browsed). I used a scatterplot to investigate the total herbaceous plant cover in each plot (response variable) by the browse severity value of that plot (predictor variable). I repeated this for the sapling data (in number of saplings per site).

3 Results

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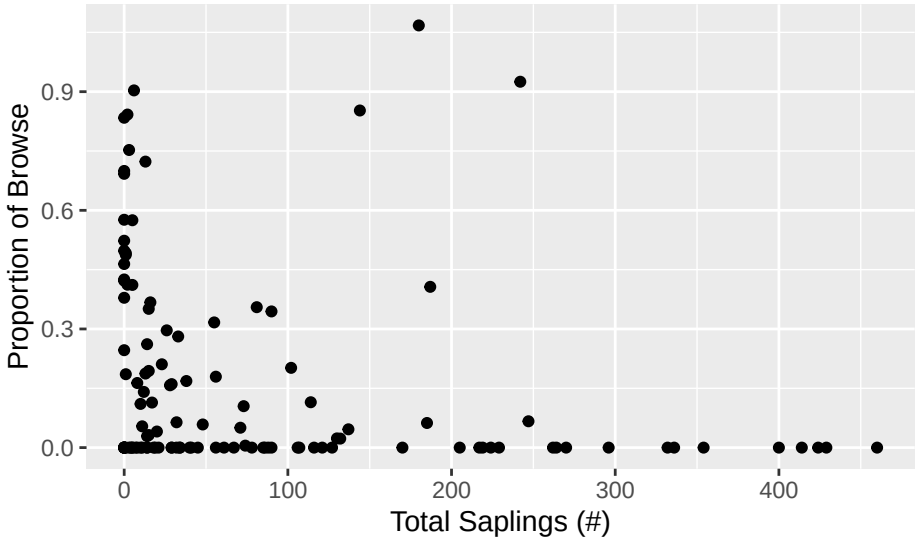

Figure 1: Number of saplings at different browse pressures

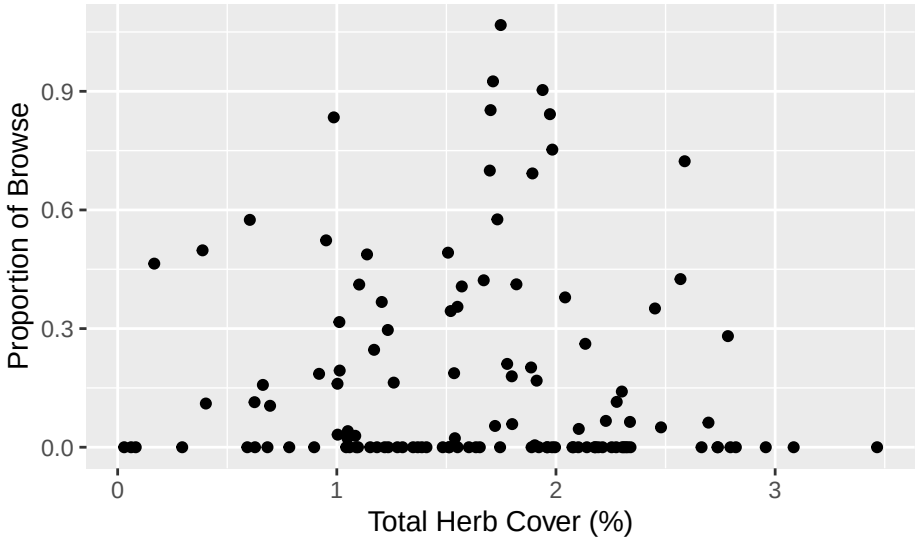

Figure 2: Herb percent covers at different browse pressures

4 Discussion

Yes, browsing pressure has an effect on understory plants (Lorentzen Kolstad et al. 2018; De Vriendt et al. 2021).

References

De Vriendt L, Lavoie S, Barrette M, Tremblay J-P. 2021. From delayed succession to alternative successional trajectory: How different moose browsing pressures contribute to forest dynamics following clear-cutting. Woods K, editor. Journal of Vegetation Science. 32(1). doi:10.1111/jvs.12945.
Lorentzen Kolstad A, Austrheim G, Solberg EJ, De Vriendt L, Speed JDM. 2018. Pervasive moose browsing in boreal forests alters successional trajectories by severely suppressing keystone species. Ecosphere. 9(10):e02458. doi:10.1002/ecs2.2458.