Preregistration

LDP Project Preregistration

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Data collection

Yes, data has already been collected and is accessible from Dryad Digital Repository (https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.3xsj3txdp).

Data Citation: De Vriendt, Laurent; Lavoie, Sébastien; Tremblay, Jean-Pierre; Brousseau, Maxime (2020), Effects of different moose browsing pressures on the succession of plant communities within the herbaceous and saplings layers of a boreal forest, Dryad, Dataset, https://doi.org/10.5061/dryad.3xsj3txdp

Hypothesis

How do different levels of browse severity affect understory plant cover?

- 1. Herbaceous plant cover will be higher with more browse due to reduced sapling competition.
- 2. Sapling cover will be lower with more browse due to high browsing mortality of preferred broadleaf forage species.**Note these hypotheses are not supported by literature and were created only for this assignment.

Dependent

variable

Herbaceous plant cover and sapling cover (understory plant percent cover).

Conditions

Understory plant percent cover will be exposed to different levels of browse severity, defined as the proportion of twigs browsed versus unbrowsed.

Analyses

I will calculate browse severity by dividing the number of browsed twigs by the total number of twigs. I will use a scatterplot to investigate the total percent cover of herbaceous plant species in each plot (response variable) by the browse severity value of that plot (predictor variable). I will repeat this for the sapling percent cover data.

Outliers and exclusions

I will not be identifying or excluding outliers.

Sample size

Data was collected at 15 paired sites (fenced and unfenced).

Study type

• Experiment

References