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

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Hypothesis

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

1. Herbaceous plant diversity will be higher with more browse due to reduced sapling competition.
2. Sapling diversity 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

Number of herbaceous plant species and sapling species (understory plant diversity).

Conditions

Understory plant communities will be exposed to different levels of browse severity, defined at 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 number 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 species 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