ON_herb Piecewise SEMs

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Load Packages & Data

Data and R packages required for data management and analyses are loaded into the environment using R (version 4.0.3, R Core Team 2020) in the RStudio environment (version 1.3.1073, RStudio Team 2020). Packages used for data management and statistical analyses:

Data Management

- tidyverse (version 1.3.0): data management

Statistical Analyses

- DHARMa (version 0.3.3.0): model diagnostics
- MASS (version 7.3-53): negative binomial GLMs

Research Question

How do urbanization herbivores interact between early and late season?

Model Fitting & Diagnostics

Prior to fitting the pSEMs, each individual model was fitted and assumptions were visually inspected using the DHARMa package. Models were fitted for both abundance and presence-absence data. Abundance models were fitted using GLMs with a Poisson distribution and log-link function or negative binomial GLMs to account for overdispersion, while presence-absence models were fitted using GLMs with a binomial distribution and logit-link function.