### Bowler, C. H., L. G. Shoemaker, C. Weiss-Lehman, I. R. Towers, M. M Mayfield. 2021. Positive effects of exotic species dampened by neighbourhood heterogeneity. *Ecology.*

### Data S1

### Stan code for Bayesian modelling of species interactions

### Author(s) [of the material provided in DataS1.zip]

Catherine Bowler  
School of Biological Sciences, University of Queensland

Brisbane, QLD, 4072, Australia  
[catherine.bowler@uq.net.au](mailto:catherine.bowler@uq.net.au)

Lauren Shoemaker

Botany Department, University of Wyoming

Laramie, WY, 82071, USA

[lshoema1@uwyo.edu](mailto:lshoema1@uwyo.edu)

Christopher Weiss-Lehman

Botany Department, University of Wyoming

Laramie, WY, 82071, USA

[cweissle@uwyo.edu](mailto:cweissle@uwyo.edu)

### File list (files found within DataS1.zip)

Make.comp.no.other.datasets.R

Run.stan.models.all.species

FecundityModel\_random1.stan

FecundityModel\_random2.stan

**Description**

Make.comp.no.other.datasets.R – code manipulates raw data files into wide data format, and merges fecundity data with community composition data. Code then splits data by focal species.

Run.stan.models.all.species - code calls on stan files in DataS1 and runs the models for each focal species separately using package rStan.

FecundityModel\_random1.stan – stan script for all focal species except *Pentameris airoides*

FecundityModel\_random2.stan– stan script for focal species *Pentameris airoides*