



This was an experiment in which we manipulated plant composition and fungal exposure in 1-m² plots, and identified fungal damage and seed production on marked individuals. There are five focal species (listed under "Species"), and three fungal treatments (listed under "Treatment"). We were not able to achieve the density gradient we planned, so we recorded both the planned density treatment (under "Density" and "BG.spp") and the actual density of common plant species (listed in the columns with plant species names). When we surveyed pathogen damage, we counted both the average percent leaf area damaged ("mean.dam") and the proportion of leaves with any damage ("prop.dam"). We also performed a mini, preliminary damage survey on a subset of the individuals ("prop.dam.mini" and "mean.dam.mini").

Column headers:

Species: Species identity of the individual (AB = *Avena barbata*, BD = *Bromus diandrus*, BH = *Bromus hordeaceus*, EG = *Elymus glaucus* adult bunchgrass, EG SEED = *Elymus glaucus* seedling, SP = *Stipa pulchra* adult bunchgrass)

Plant.ID: Unique identifier for each individual

Seed.estimate: Number of seeds produced by the individual

Notes: For *Avena* spp. we were sometimes unable to tell early on which species they were. The note in this column indicates whether the individual turned out to be *Avena barbata* (AB) or *Avena fatua* (AF).

Plot: Number indicating which plot an individual was located in

EG.adult: Number of *Elymus glaucus* adults in the plot

EG.seed : Number of *Elymus glaucus* seedlings in the plot

SP.adult: Number of *Stipa pulchra* adults in the plot

SP.seed : Number of *Stipa pulchra* seedlings in the plot

BH: Number of *Bromus hordeaceus* plants in the plot

BD: Number of *Bromus diandrus* plants in the plot

Avena: Number of *Avena* spp. plants in the plot (we were unable to determine whether plants were *Avena barbata* or *Avena fatua*)

FEMY: Number of *Festuca myuros* plants in the plot (a weed grass)

BRADIS: Number of *Brachypodium distachyon* plants in the plot (a weed grass)

Forb: Number of forbs (non-grass and non-nitrogen fixer weeds) in the plot

Fabaceae: Number of nitrogen-fixing plants (weeds in the family

Fabaceae) in the plot

GAST: Number of *Gastroidium phleoides* plants (a weed) in the plot

Density: Planned competitor density in the plot

BG.spp: Planned competitor species in the plot (BG stands for background)

rust: binary indicator of whether or not a plant had rust fungus infection

prop.dam.mini: proportion of leaves with pathogen damage from a mini damage survey of a few of the plants early in the season

mean.dam.mini: mean percent of leaf area damaged from a mini damage survey of a few of the plants early in the season

Treatment: fungal treatment - fungicide application, ambient (water controls), or fungal inoculation

prop.dam: proportion of leaves with pathogen damage from the main damage survey of most of the plants

mean.dam: mean percent of leaf area damaged from the main damage survey of most of the plants