

Read me file for data from:

Reed, P.B., Bridgham, S.D., Pfeifer-Meister, L.E., Peterson, M.L., Johnson, B.R., Roy, B.A., Bailes, G.T., Nelson, A.A., Morris, W.F., and Doak, D.F. (2021). Climate warming threatens the persistence of a community of disturbance-adapted native annual plants. Ecology (in press).

This document describes the column headers in each of the three data files. See methods section in manuscript for complete details regarding the data.

“GerminationSurvival.csv”

Column	Description
species	Abbreviations are the first three letters of the genus and the first three letters of the species (see Table 1 in manuscript).
exp	Experiment 1 (2010-2012) or 2 (2016-2018).
year	The growing season year based on the spring season (e.g., March-June 2010 = “2010”).
site	Experimental site.
plot	Plot.
clm.trt	Climate treatment.
bms.trt	Biomass removal treatment (half-plots in 2012 and 2017 = “removal” category; all others = “control”).
disturb	Disturbance category.
Nseeded	Number of seeds planted in the previous fall.
Ngerm	Number of seeds that germinated.
Nnogerm	Number of seeds that did not germinate.
Nthinned	Number of germinants that were thinned.
Nflwr	Number of germinants (minus thinned) that survived to reach flowering.
Nnoflwr	Number of germinants (minus thinned) that did not survive to flower.
Pgerm	Probability of germination (N_{germ}/N_{seeded}).
Psurv	Probability of survival ($N_{flwr}/(N_{flwr} + N_{noflwr})$).
Prec	Probability of recruitment ($P_{germ} * P_{surv}$).
Nrec	Number of recruits ($Prec * N_{seeded}$).
Nnorec	Number that did not recruit ($N_{seeded} - N_{rec}$).

“SeedProduction.csv”

Column	Description
species	Abbreviations are the first three letters of the genus and the first three letters of the species (see Table 1 in manuscript).
exp	Experiment 1 (2010-2012) or 2 (2016-2018).
year	The growing season year based on the spring season (e.g., March-June 2010 = “2010”).
site	Experimental site.
plot	Plot.
clm.trt	Climate treatment.
bms.trt	Biomass removal treatment (half-plots in 2012 and 2017 = “removal” category; all others = “control”).
disturb	Disturbance category.
Nseeds.mean	Mean number of seeds per individual.
wtmean	Number of individuals from which the mean value was calculated. Used to weight the regression model.

“ClimateData.csv”

For all data columns:

A, B, and C refer to the 4-month mean seasonal aggregated values for each growing season year.

A = summer seasonal aggregate (July – October).

B = winter seasonal aggregate (November – February).

C = spring seasonal aggregate (March – June).

The year column refers to the spring season (when plant data was collected), so A and B seasonal aggregates contain data from the previous calendar year. For example, if the row is year 2010, then tempA = July 2009 – October 2009, tempB = November 2009 – February 2010, tempC = March 2010 – June 2010.

Column	Description
exp	Experiment 1 (2010-2012) or 2 (2016-2018).
year	The growing season year based on the spring season (e.g., March-June 2010 = “2010”).
site	Experimental site.
plot	Plot.
tempA	PRISM-derived macroclimate temperature variable for the summer season (see Appendix S1: Section S3 for details on converting plot-level microclimate variables to macroclimate indices).
tempB	PRISM-derived macroclimate temperature variable for the winter season.
tempC	PRISM-derived macroclimate temperature variable for the spring season.
precipA	PRISM-derived macroclimate precipitation variable for the summer season.
precipB	PRISM-derived macroclimate precipitation variable for the winter season.
precipC	PRISM-derived macroclimate precipitation variable for the spring season.
aetA	PRISM-derived macroclimate actual evapotranspiration variable for the summer season.
aetB	PRISM-derived macroclimate actual evapotranspiration variable for the winter season.
aetC	PRISM-derived macroclimate actual evapotranspiration variable for the spring season.
petA	PRISM-derived macroclimate potential evapotranspiration variable for the summer season.
petB	PRISM-derived macroclimate potential evapotranspiration variable for the winter season.
petC	PRISM-derived macroclimate potential evapotranspiration variable for the spring season.
cwdA	PRISM-derived macroclimate climatic water deficit variable for the summer season.
cwdB	PRISM-derived macroclimate climatic water deficit variable for the winter season.
cwdC	PRISM-derived macroclimate climatic water deficit variable for the spring season.

ctempA	Plot-level canopy temperature measurement for the summer season.
ctempB	Plot-level canopy temperature measurement for the winter season.
ctempC	Plot-level canopy temperature measurement for the spring season.
vwcA	Plot-level volumetric water content measurement for the summer season.
vwcB	Plot-level volumetric water content measurement for the winter season.
vwcC	Plot-level volumetric water content measurement for the spring season.