

Supporting Information. Cavender-Bares, J.M., A.K. Schweiger, J.A. Gamon, H. Gholizadeh, K. Helzer, C. Lapadat, M.D. Madritch, P.A. Townsend, Z. Wang, and S.E. Hobbie. 2021. Remotely detected aboveground plant function predicts belowground processes in two prairie diversity experiments. *Ecological Monographs*.

Appendix S2

Table S1. List of data collected in the BioDIV experiment at the Cedar Creek Ecosystem Science Reserve in Minnesota and in the Wood River Nature Conservancy prairie diversity experiment in Nebraska, including year collected, and whether the data component has been previously been published.

Year	Experiment	Factor measured on the ground	Remotely sensed data collected	Number of plots (or subplots)	Previously published
2014	BioDIV		AVIRIS NG	All plots	Wang et al 2019
2014	BioDIV		Plant trait map	All plots	Wang et al 2019
2014	BioDIV		Plant FD	All plots	Current study
2014	BioDIV	Plant aboveground biomass		154 plots	Cline et al 2018
2014	BioDIV	Plant richness and species biomass		154 plots	Cline et al 2018
2014	BioDIV	Functional group biomass and proportion		154 plots	Cline et al 2018
2014	BioDIV	Functional diversity - leaf level			Schweiger et al 2018
2014	BioDIV	Soil extracellular enzyme activity		35 plots	Cline et al 2018
2014	BioDIV	Microbial biomass		35 plots	Cline et al 2018
2014	BioDIV	Soil N and C		154 plots	Cline et al 2018
2015	BioDIV	Leaf level spectral data			Schweiger et al 2018
2015	BioDIV	Functional diversity - leaf level			Schweiger et al 2018
2015	BioDIV	Bacterial composition		35 plots	Current study
2015	BioDIV	Bacterial diversity		35 plots	Current study
2015	BioDIV	Fungal composition		35 plots	Cline et al 2018
2015	BioDIV	Fungal diversity		35 plots	Cline et al 2018
2015	BioDIV		AVRIS NG	all plots	Wang et al 2019

2015	BioDIV	Root chemistry		35 plots	Current study
2015	BioDIV	Soil respiration		35 plots	Cline et al 2018
2015	BioDIV	Net mineralization rate		35 plots	Cline et al 2018
2016	BioDIV		AVIRIS NG	all plots	Wang et al 2019
2016	BioDIV	Soil N and C		154 plots	Current study
2017	Wood River		CALMIT- AISA Kestrel	all plots	Gholizadeh et al 2019
2017	Wood River		Plant trait maps		Current study
2017	Wood River	Plant richness in plots		36 plots	Gholizadeh et al 2019
2017	Wood River	Plant species percent cover subplots		144 subplots	Current study
2017	Wood River	Plant aboveground biomass		144 subplots	Current study
2017	Wood River	Leaf level spectral data		144 subplots	Current study
2017	Wood River	Leaf level functional diversity		144 subplots	Current study
2017	Wood River	Soil extracellular enzyme activity		144 subplots	Current study
2017	Wood River	Microbial biomass		144 subplots	Current study
2017	Wood River	Net nitrogen mineralization rate		144 subplots	Current study
2017	Wood River	Soil NO ₃ , NH ₄ , N and C		144 subplots	Current study

Literature Cited

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