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# Quantifying the contribution of plant-soil feedbacks to coexistence in a sagebrush steppe

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**Data Management Plan**

We are committed to open science, as demonstrated by the series of "Data Papers" that Adler has published in *Ecology* and by the Dryad Digital Repository data packages his lab has distributed with recent papers. We use flat text files to store data and metadata and R scripts for data analysis, often housed on Github, consistent with current best practices for reproducibility and data and code sharing. Our data and code are stored in the cloud (e.g. Github repositories) or on an automatically backed up server maintained by Utah State University, with additional back up on local hard drives and external disc drives.

The proposed research will generate the following datasets:

Measurements of *seed and seedling performance* in the field and greenhouse experiments experiment will include the germination, emergence, and survival of individual plants. We will archive final versions of these data sets, and corresponding metadata, as text files uploaded to the Dryad depository and linked to the publications that use these data. The Dryad repository works with journals to ensure that data accessibility does not violate journal copyrights, while allowing for the secure storage of raw data and access to this data by other researchers.

Data on *soil moisture, nitrogen availability, and soil depth* in the field experiment will also be uploaded to Dryad as text files, and stored in the same data packages as the seed and seedling performance data.

The *computer code* that we write to analyze the data from the monoculture experiment will also be included in the Dryad data packages. These scripts will include traditional ANOVA analyses written in R, hierarchical Bayesian models in R and jags, and simulations of the population models in R.

In order to help other researchers find our Dryad data packages, we will link to them from our individual lab web pages, and from all publications that use the data.

We are committed to distributing all data within two years of the project end date.