WAPS Analysis Notes:

* Questions to be resolved with data:
  + Status of community data for the spring of 2018 (two years post-drought)? Is data cleaned and available?
* Notes on Compositional Analyses:
  + On the whole, there are very interesting patterns in functional group (WAPS, natives, annuals) abundance in each plot over time.
    - Some planting compositions appear more stable than others
    - Over time, there appear to be different sets of fluctuations depending on who is planted initially.
  + With a species-specific perspective on compositional change, however, patterns appear to be less clear – there is very little evidence for compositional stability on the species level. All communities appear to fluctuate over time, regardless of what community was planted first.
  + What is interesting, however, is that despite this lack of compositional stability, there is little evidence that communities are becoming more similar over time. Metrics of community dispersion within blocks indicate that the amount of dissimilarity among different treatments is quite consistent:
  + What this suggests to me is that communities are fluctuating, either randomly in a more deterministic pattern of state-change, and that the initial state and subsequent changes are dependent on planting composition.
* Next steps:
  + I think that a state-change perspective to understanding priority effects might be a promising way to analyze this data. There is evidence that this sort of approach works in California grasslands and can produce some interesting results. For citations, see:
    - Suding
    - Bagchi
    - Dahlgren + Jackson
  + In brief, this technique involves:
    - Assigned groups to different states using a clustering algorithm
    - Quantifying whether these groups explain a relevant portion of variation
    - Detecting which states are most present at a given point in time and directionality of that change.
  + Ways to modify previously asked questions are:
    - Based on planting composition, what states are most likely to be generated in year 1?
    - Which communities tend to be most static in their community state over time?
    - When communities transition, from what state to what state do they transition to?
    - What causes community state change? Do the odds of transitioning between states vary with:
      * Climatic patterns