**Name: \_\_\_Gina\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_Aug 23 2018\_\_\_\_\_\_\_\_\_\_\_**

1. General Info
   1. Proposed Title: *When do diverse rotations shine?*
   2. Likely coauthors: *Matt Liebman*
   3. Proposed journal (1st choice): *not sure, this is exploratory*
   4. Proposed journal (backup): *[enter journal here]*
2. The overarching question of this paper is: *In what types of growing conditions does maize produced in diverse rotations out-yield maize in simple rotations?*
3. Which is important/interesting/unresolved because (1-4 reasons)
   1. *Maize grown in diverse rotations has less variable and on-average higher yields – it is still not clear why this is.*
   2. *In some years the diverse-rotation maize significantly out-performs simple-rotation maize, while in other years they perform the same.*
   3. *[fill in]*
4. To answer this question/explore this topic, I addressed the following objectives: (NB you can have more or less than 3 objectives, but I recommend 2-4)
   1. *Identify weather-related drivers of maize yield variability in diverse and simple systems.*
   2. *Identify what types of weather patterns lead to higher yield differentials between diverse- and simple-rotation maize. i.e. in what types of environments do rotations ‘shine’*
5. I addressed these objectives: (use list/bullet points below)
   1. In *Boone Iowa*
   2. With the following focal/model species/model system: *A 2-, 3-, and 4-year maize-based crop rotation.*
   3. And the following approaches: *Measured yield and weather.*
6. For my analysis, I want to test: *Whether years when yield differentials between simple- and diverse-grown maize have something in common.*
7. My response (y-axis) variable is: *Yield*
8. My predictors (x-axis/colors/shapes on the graph) are: *Years, and their weather.*
9. I replicated this across multiple *years*.
10. I think I will need to analyze these data using a *path analysis (?). Need to investigate further.*
11. I anticipate I will get a final figure(s) that will look like this *Something like this:*

