**Name:** Jessica Nelson**\_\_\_\_\_\_\_\_\_ Date:** 8/25

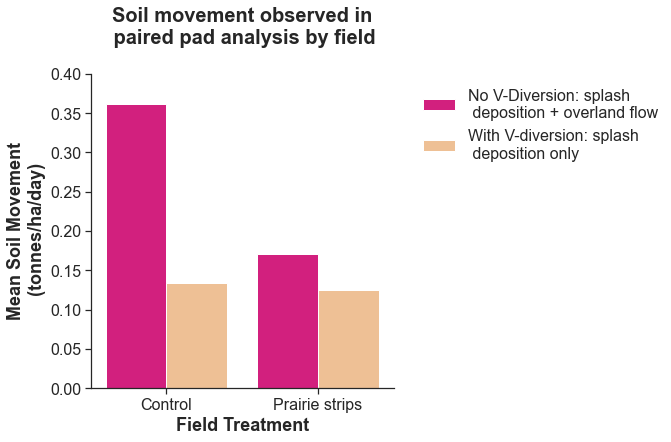
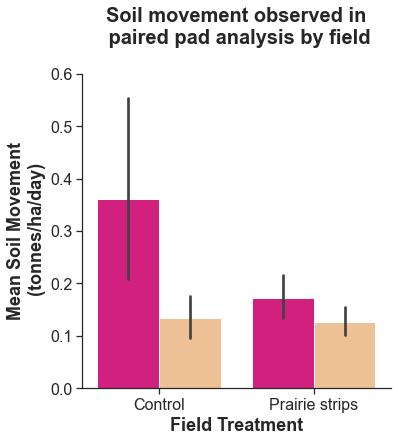
1. General Info
   1. Proposed Title: *From top to bottom: Where is deposition occurring?*
   2. Likely coauthors: *Matt Liebman, Jarad Niemi, Katherine Goode, Rick Cruse, John Tyndall*
   3. Proposed journal (1st choice): *Journal of Soil and Water Conservation Society*
   4. Proposed journal (backup): *Journal of Environmental Quality*
2. The overarching question of this paper is

*Does strips of native prairie vegetation planted in cropped fields reduce the amount of sediment leaving a field.*

1. Which is important/interesting/unresolved because (1-4 reasons)
   1. *There is little known about this across different crop management.*
   2. *There is little known about this across different landforms in Iowa.*
   3. *Prairie strips are a relatively new conservation practice and we want to share information with people so they can learn more about how to most effectively implement them on their farms.*
   4. *Soil erosion is significantly impacting farmland and we are seeing severe degradation and impacts to crop productivity with increases erosion.*
2. 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. *Studied 12 paired farms located on different landforms in Iowa.*
   2. *Paired treatment (+ prairie) and control (- prairie) together based on farm management decisions to compare soil displacement patterns under various crop rotations, tillage, and environmental conditions.*
   3. *Monitored in-field soil displacement patterns using mesh erosion pads distributed along the hillslope throughout fields.*
   4. *Compared amount of erosion due to splash vs. sheet and rill erosion.*
3. I addressed these objectives: (use list/bullet points below)
   1. In *Iowa*
   2. With the following focal/model species/model system: *row-crop systems (corn and bean rotations)*
   3. And the following approaches: *paired watershed analysis*
4. Each row of data in my dataset is a weight observation at a mesh erosion pad location.
5. For my analysis, I want to test: *if strips of native prairie planted along the contour of farm fields has an effect on in-field soil displacement patterns, and if prairie strips*
6. My response (y-axis) variable is: *mass soil per area.*
7. My predictors (x-axis/colors/shapes on the graph) are: *treatment (+ prairie) vs. control (- prairie).*
8. I replicated this across multiple *sites (i.e., paired watersheds.*
9. I think I will need to analyze these data using a *mixed linear model and multiple linear regressions.*
10. I anticipate I will get a final figure(s) that will look like this *[sketch one or more figures below that you could imagine being part of the final paper]*

Chart, bar chart

Description automatically generated



Chart, scatter chart

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