**Name:** Bekah Reynolds **Date: 9-17-19**

1. General Info
   1. Proposed Title: Mosquito surveillance finds established populations of the invasive mosquito Aedes albo pictus in Iowa
   2. Likely coauthors: Ryan Smith, Ryan Tokarz
   3. Proposed journal (1st choice): Emerging Infectious Diseases
   4. Proposed journal (backup): Frontiers in Veterinary Science
2. The overarching question of this paper is: **Can we demonstrate that *Ae. aegypti,* an invasive mosquito that can transmit Zika, is established in Iowa?**
3. Which is important/interesting/unresolved because (1-4 reasons)
   1. The CDC predicted that *Ae. albopictus* had a range that spread into MN but that was not previously demonstrated. In the last two years we have found high numbers of this mosquito species in several counties around Iowa.
   2. What recent factors (environmental, travel frequency, etc.) change in the last few years to allow for *Ae. aegypti* to be established in Iowa now*?*
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. What are the similarities between the counties that have consistent populations of *Ae. aegypti*?
   2. Do we see specific environmental changes occurring prior to 2017 that indicate the environment would become more suitable for *Ae. aegypti*
5. I addressed these objectives: (use list/bullet points below)
   1. In 3 counties in Iowa
   2. With the following focal/model species/model system: *Ae. aegypti* mosquitoes
   3. And the following approaches:Active mosquito surveillance
6. Each row of data in my dataset is a week during the summer.
7. For my analysis, I want to test: Factors correlated with the weeks of the summer when we find *Ae. albopictus*
8. My response (y-axis) variable is: Mosquito abundance
9. My predictors (x-axis/colors/shapes on the graph) are: Weeks of the summer
10. I replicated this across multiple: years
11. I think I will need to analyze these data using a: I honestly have no idea... there is a similar paper that used a population dynamic model but I’m not sure how to do that at this point
12. 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]*