Proposal Title

Author last name, author first name. Authors can be listed alphabetically.

Formatting guidelines: you may use this document as a template. Font is to be 12 point. Margins are to be "normal," 1-inch margins. You may use a font of your choice. **The document is not to be greater than 10 pages, including references.**

Introduction

Introduce the topic, starting broadly and narrowing down to your specific objectives. Cite any literature used to support the statements you make. Citations in the text should be formatted as follows:

(First author last name, et al. if multiple authors are on the publication, date)

Example:

Grassland bird populations in the United States and Canada have declined by 53% since 1970 (Rosenberg et al. 2019). Habitat loss as a result of agricultural expansion and intensification is one primary driver of grassland bird decline (Brennan & Kuvlesky Jr. 2005). The outcomes of conservation programs have been mixed (Kleijn et al. 2006), because of differing landscape contexts, varying quality of resources added by conservation programs, or because evaluations of conservation effects rarely match the scale of policy objectives (Kleijn et al. 2011). Conservation policy prioritization and assessment should be conducted in the context of the broader landscape and should consider how local processes, such as the arrangement and density of conservation parcels, scale up to regional biodiversity trends (Kleijn et al. 2011). Moreover, species respond to restoration activities in a varied fashion making it difficult to generalize the efficacy of individual management actions to an entire community of animals.

The National Bobwhite Conservation Initiative (NBCI) has identified areas to focus management for Northern Bobwhite (Colinus virginianus) conservation. These areas, identified as Coordinated Implementation Program (CIP) focal areas, have a goal of at least 1,500 acres of habitat comprising at least 25% of the total area. Furthermore, CIP areas are designed to achieve population objectives set by state agencies and other important stakeholders. There is uncertainty regarding the necessary habitat and management requirements in CIP areas to meet these habitat and population objectives. The Conservation Reserve Program (CRP) is one vehicle to deliver habitat; however, the presence of CRP on CIP areas and their influence on grassland bird and monarch butterfly populations is not entirely understood. Phase 1 of the CRP CIP Study identified some key patterns regarding CRP effects but a few questions linger such as the effect of mid-contract management and local vegetation conditions on wildlife; whether landscape context mediates the effect of CRP (e.g., does it matter if a CP2 field is next to a forest or corn field); and taken collectively, how can we deliver CRP most efficiently given acreage caps?

Objective(s)

List the objectives of your study here. These can be simply stated, listed, or included in bullet points.

Example:

1. Fine tune existing models to include the effect of vegetation conditions and how they interplay with the amount of CRP on the landscape
2. Relate mid-contract management to vegetation conditions and subsequent habitat quality for grassland birds and monarch butterflies
3. Relate the amount of mid-contract management in surrounding landscapes to grassland bird density and monarch butterflies
4. Estimate how landscape context (e.g., focus area or reference) modifies the effect of CRP on and monarch butterflies
5. Use statistical analyses, simulation techniques, and spatial data to optimize CRP practices at each CIP area in order to maximize efficiency

Study Site

Described the location and characteristics of your study site. What state, county, and location are you working in. What are the geographic points? What are the characteristics of the soil, topography, and vegetation? You are welcome to use maps here.

Methods

Describe your proposed methods in as great a detail as possible. What techniques do you plan to use? How many samples do you propose collecting? Why do you think that's enough samples? What information will you specifically collect at each sampling location? How do you propose to analyze the data to address your objectives?

Management Implications

What are the management implications from this work? How might this inform management, species conservation, development, improve our ecological understanding, etc.?

References

List any references used here. Remember: use reliable sources! Peer reviewed, published literature, books, university-published information, federal or state wildlife organization published information, etc. Citations may follow the format of your choice, but should be consistent and include the following information:

- Author name(s)
- Year published
- Title
- Journal, book, or outlet name
- Pages where found

Example:

Rosenberg, K. V, A. M. Dokter, P. J. Blancher, J. R. Sauer, A. C. Smith, P. A. Smith, J. C. Stanton, A. Panjabi, L. Helft, M. Parr, and P. P. Marra. 2019. Decline of the North American avifauna. Science 366:120–124.