Ralphie Buffalo SAMPLE Prospectus, Timeline, and Initial Bibliography:

Buffaloes in Their Natural Habitat: Range, Ecology, and Climate Change Impacts

Prospectus:

1. Introduction

Buffaloes, specifically the American bison (Bison bison) and the African buffalo (Syncerus caffer), are majestic and resilient creatures integral to their respective ecosystems. This research paper aims to explore the geographic range and natural habitats of these two buffalo species and examine how climate change may impact their health and survival. Understanding these dynamics is crucial for conservation efforts and the preservation of biodiversity.

2. Objectives

The primary objectives of this research paper are:

- 1. To delineate the historical and current ranges of American and African buffaloes.
- 2. To describe the natural habitats of these buffalo species, including their ecological roles and interactions with other species.
- 3. To analyze the potential effects of climate change on buffalo health, focusing on aspects such as disease prevalence, food availability, and habitat alterations.

3. Literature Review

The literature review will cover:

- Historical range data and population dynamics of American and African buffaloes.
- Ecological roles of buffaloes in their respective habitats, including their impact on vegetation and interactions with predators and prey.
- Existing research on climate change effects on large herbivores, with a focus on how these effects might translate to buffalo populations.

4. Methodology

4.1. Geographic Range and Habitat Analysis

- **Data Collection**: Utilize historical records, satellite imagery, and field surveys to map the historical and current ranges of American and African buffaloes.
- **Habitat Description**: Examine vegetation types, climate conditions, and other environmental factors that characterize the natural habitats of each buffalo species.

4.2. Climate Change Impact Assessment

- **Health Indicators**: Analyze data on buffalo health, including disease incidence, nutritional status, and mortality rates.
- **Climate Data**: Integrate climate models and projections to assess how changes in temperature, precipitation, and extreme weather events may influence buffalo habitats and health.
- **Field Observations**: Conduct on-the-ground assessments to observe changes in habitat conditions and buffalo health directly.

5. Expected Outcomes

- **Range Maps**: Updated and detailed maps showing the historical and current ranges of American and African buffaloes.
- **Habitat Characteristics**: Comprehensive descriptions of the ecological conditions and factors that support buffalo populations.
- **Impact Analysis**: Insights into how climate change is likely to affect buffalo health, including potential changes in disease patterns, food resources, and habitat suitability.

6. Significance

This research will contribute to the understanding of buffalo ecology and the implications of climate change on these iconic species. By providing a detailed analysis of buffalo habitats and health, the paper will inform conservation strategies and policy-making aimed at mitigating the impacts of climate change on large herbivores. The findings will be valuable for wildlife managers, conservationists, and researchers working to preserve buffalo populations and their ecosystems.

This prospectus outlines a research paper that aims to bridge gaps in our understanding of buffalo ecology and the impacts of climate change on their health. The findings will be instrumental in guiding future conservation efforts and ensuring the long-term survival of these remarkable species.

Timeline:

May-June 2024: Literature review and data collection.
July-August 2024: Geographic range and habitat analysis.
September 2024: Climate change impact assessment.
October 1, 2024: Deadline to register project with Honors Program
October-November 2024: Data analysis and interpretation.
December 2024-February 2025: Writing and revision of the research paper.
January 2025: Contact committee members to schedule thesis defense in mid-March
Late February-early March 2025: Final project review and submission.
April 9, 2025: Last day to defend thesis
April 15, 2025: Final copy due to CU Scholar by 11:59pm
April 18, 2025: Notification of Latin honors awards by 5pm

Initial Bibliography:

"Where the Buffalo Roam" by Anne Matthews "Why Buffalo Roam" by L. Michael Kershen "The National Historic Preservation Act: Past, Present, and Future" by Kimball M. Banks and Ann M. Scott